Curl Coach

User's Guide

Version 0.8.4

Introduction

Welcome to Curl Coach 2, the best way to track your curling team's performance, identify areas for improvement and make those improvements happen. Curl Coach 2 is a complete re-write of the original Curl Coach, and is designed to take advantage of many of the latest features of iOS, including split screen multitasking, dynamic screen sizes and external displays. If you are an experienced Curl Coach user, Curl Coach 2 will provide a number of new features to make using the app easier and more powerful, while still keeping the same familiar approach to charting. If you are completely new to Curl Coach, this version has a number of key features designed to make it easier to get going.

Curl Coach Subscriptions

Curl Coach 2 is made available on the App Store via an annual subscription. Here's how that works.

In order to **create** or **import** content, including **charting** or **editing** games, **adding players** or **teams**, creating **drills**, **practices**, or **strategy book** content you must have an active subscription. Your subscription also allows you to stream unlimited games on **LiveStones** throughout your subscription.

There are no tiers, add-ons or hidden gotchas.

A subscription is NOT required in order to replay existing games or strategy books, use the dashboard to analyze the data you already have, export information to another coach, generate PDF reports, and other similar activities. In addition if new versions of Curl Coach include new ways of analyzing your existing data, that new analysis is available with or without a subscription.

While Curl Coach 2 will periodically check your subscription to ensure it is still active, there is no requirement to be on-line and connected to use Curl Coach 2. Curl Coach 2 will maintain the expected renewal date for your subscription and only prevent you from using the full features of the application if your subscription has been cancelled, or the expiry date of your last renewal has passed.

The Main Components of Curl Coach

Let's start by looking at an overview of the various components that make up Curl Coach. Where required these components have detailed sections later in this guide. Curl Coach allows you to create all of the information associated with managing a curling team and tracking them at competitions and practices, and provides the tools to work with them. The main components that you will work with are as follows:

Players

In Curl Coach a **Player** is an athlete. To create a **Player** you must specify a name and whether they are left or right handed. Optionally you can record other information like emergency contacts, date of birth, etc.. You can identify a **Player** as an "opposition" player, making it easier to find them when doing substitutions, etc.

Teams

A **Team** is a collection of players, a team name, skill level, age category and team makeup. A **Team** has 4 players with declared positions and unlimited alternate players. A doubles **Team** has exactly two players. Teams may include a coach, home club and other information. A **Team** can be designated as an opposition team, making it easier to search for.

Venues

A **Venue** is any place where curling events take place. A **Venue** needs a name, number of sheets, whether the sheets are numbered or lettered, and the colours used for the stones. Other information can be provided including email, phone, address, managers name as well as specific colours for the rings. Curl Coach encourages you to fill out ALL of the details for your home club and share it so that other coaches can easily search for and download club details the first time they visit.

Competitions

A **Competition** is used to track the games for a single team at a single event. A

Competition may last a single day, multiple days, or might represent a league that runs for a season. What is important is that all of the games be related so that analysis of the games as a group makes sense. You need an event name, start date, a **Venue**, and the **Team** that is competing. You then add **Games** to a competition in order to chart what happens and develop the stats.

Games

Games are central to using Curl Coach. This guide includes extensive discussions around how to chart games correctly and then how to make use of the results of charting. Fundamentally a **Game** includes the team competing (which is taken from the competition), the format of the game, venue, rules (free guard zone, how to break ties, etc.) and possibly an opposition team. While there are significant benefits to including an opposition team when you chart a **Game**, it is optional. If you do not include an opposition team, Curl Coach asks for a team name as an identifier.

Dashboard

The **Dashboard** is where you look at the statistics for your team and opposition teams. It provides many ways to look at a teams performance letting you build strategies around a teams strengths, lead development to address weaknesses, and tactics that exploit weaknesses in opposition teams. The Dashboard can provide analysis of individual **Players**, **Teams**, **Competitions** and individual **Games**. From an analysis perspective the Dashboard is an umbrella that brings all of the components together.

Other Components

While the main components of Curl Coach include players, and teams etc. as described in the previous section, Curl Coach also includes a number of other important components that you should be aware of. These include:

Strategy Book

The Strategy Book is a place where you can collect Strategic Situations (essentially a collection of stones on a curling sheet, along with a game context), and associated Tactics (the selection of shots that might be thrown to deal with the situation along with discussion about the pros and cons of each). Situations can be added to the Strategy Book by copying them from an actual game, by manually placing stones and adding a description, or by using the "Strategy Time" situation generator to semi-randomly create situations for discussion

Drills

Curl Coach comes with a built in set of standard curling **Drills**, as well as the ability to create your own **Drills**, modify copies of existing drills and share drills with other Curl Coach users. **Drills** are also used as the basis for building **Practices**.

Practices

The **Practice** module provides you with the ability to plan **Practices** against scheduled ice time for individual players, groups of players or teams. The tools allow you to select, order and schedule **Drills** to fit the available ice time, look at technical weaknesses for the participant and use filters to find drills that are designed to address those weaknesses.

LiveStones

LiveStones is Curl Coach's connection to the cloud. With LiveStones you can share games, either in real-time, or after they have been completed so that others can watch them. LiveStones is the ideal way to allow your team's fans to follow games that they cannot attend in person. LiveStones also contains a repository of curling Venues that have been shared by other users of Curl Coach. These venues can be searched and downloaded, making it easier to prepare for an event at a curling club you may not have visited before.

Options

Curl Coach has literally dozens of ways in which its behaviour can be customized to work the way you want it to work. The majority of these are controlled through the Options menu entry. By tapping on the name of an option a brief description of its purpose is shown. In most cases the specific options are not described in this guide.

Resources

Finally, Curl Coach includes a number of PDF resources (including this guide) which can be printed and used as you wish. Some of these are handy forms and templates provided as a resource for coaches , while others provide additional descriptions on how Curl Coach works at a more detailed level than this guide. For example, the "*Shot Scoring*" resource explains how Curl Coach determines the score when automatically scoring shots.

Getting Around In Curl Coach

In general Curl Coach uses 4 ways of presenting information to you and 1 method for navigating to the specific information you wish to work with. Let's take a look at these.

Navigation

Curl Coach 2 includes a navigation menu that looks like a Curling Stone in the top right of most screens. Tapping on the stone reveals options, typically divided into 3 sections. In some instances one or more sections may not be included if they are not appropriate / available at that time. The three sections are:

Actions

This section is shown top right and includes things you can do related to the item on the current page, for example, you might be able to create a Team Report on the Team page, or rotate the curling sheet while charting.

Other Pages

This section is used to switch to other parts of Curl Coach. For example from the competition page you can switch to the Strategy Book, or the Drills book, or a number of other locations. This section is below the Actions section described above.

Items

The final section provides a list of items for the current page. For example, the Competition page would show a list of all of your competitions, while the player page would show a list of your players. Selecting an item from the list allows you to work with that item in the main page. In some cases there may be an option at the top of the list to filter what is shown in the list, for example only seeing Teams marked as opposition teams.

On smaller screens, the sections may be stacked and you will have to scroll to see all possible options.

Information Pages

Information screens provide all of the information about a particular item, for example a competition, a venue, or a drill. The information is organized into "cards", each of which provides a portion of the information, for example, the Team page includes the following cards:

- Info
- Roster
- Competitions
- Games
- Line Stats
- Practices
- LiveStones Fans
- Notes

Where appropriate, cards include an "Add" or "Edit" button that lets you create a new item to a card or modify the contents of a card. In some cases editing may be disabled once it is no longer appropriate (for example, the team at a competition cannot be changed after a game has been added to that competition.

Many information pages include a help button in the top left that provides some guidance on the current page, and a button to create a new item.

Some information pages, like the Resources page or the LiveStones Game Management page don't include the ability to create a new item, but will provide some other way to interact with the associated content.

The arrangement and size of the cards adjusts automatically to match the available space on the screen as you rotate your device, split the screen for multitasking, etc.

Sheet Pages

Sheet pages, as the name implies, include a curling sheet for one reason or another. These are the Game Chart, Review and Replay pages as well as the Edit Drill and Edit Strategy Situation pages. All sheet pages can be laid out either right handed (with the sheet on the right side) or left handed (reversed). On narrow screens the content is arranged in 2 panels, each filling the screen and include controls for switching back and forth between the sheet and the other content.

New Item Pages

When creating a new item of some type, Curl Coach guides you through the process with a series of specific questions aimed at collecting the minimum amount of information required to start working with that item. For example, if you are creating a new player, Curl Coach only asks you for the players first and last name, and whether they are left or right handed. Once the minimum information is provided, Curl Coach will switch to the Information Page (described earlier) for that item and allow you to edit it to add any extra details as you desire. In some cases, Curl Coach may guide you through creating a number of items and will organize them together for you, for example, creating a new competition requires you to either select an existing team or create a new one. In creating a new team your will need to select or create 4 players for the team (2 in the team is a Doubles team). You will also need to either select or create a venue and optionally an opposition team. While there are a number of steps required, Curl Coach carefully walks you through these steps and only asks for the minimum information required to move on to the next step.

The Dashboard

Curl Coach presents its analysis of all the data you create in its Dashboard. The dashboard is organized in columns, with each column either providing a specific piece of analysis, or providing the ability to focus on specific part of the data to find the specific analysis you wish to review. You can enter the dashboard from the perspective of one of your Players, a Team, a Competition, or a specific game, but from that point you are free to explore the various reports and summaries that Curl Coach can create.

You can also generate formatted PDF reports from any view of the dashboard in order to be able to analyze and share off-line. There is a section later in this guide that covers the dashboard in some detail including suggestions for best practices, etc.

Creating a Competition and Adding Games

Add a Competition to a Team

From the **Team** page, find the card titled "Competitions" and tap on Add. Curl Coach will ask you to provide the name of the competition, a start date, the governing body for the competition, and either select an existing venue or create a new venue.

Once you have answered all of these questions, Curl Coach will automatically display the **Competition** page and select your newly created competition. Your Competition is now ready to chart its first game (see below).

Create a New Competition

From the **Competition** page, tap on the "Create New" button at the top right of the screen (note: this button may appear as a 'New' button or a '+' button on smaller screens). Curl Coach will ask you to provide the name of the competition, a start date, the governing body for the competition, and either select an existing venue or create a new venue. Finally you can either select an existing team, or create a new team for the competition.

Once you have answered all of these questions, Curl Coach will automatically display the **Competition** page and select your newly created competition.Your Competition is now ready to chart its first game (see below).

Editing a Competition

If required you can edit the competition information by tapping on the edit button.

You can also change the team or the team line-up for this event. Tap on "Change Team" to select a different team for this event, or "Add Players" to add additional players to the lineup. You can remove players, or replace them by swiping left on the players name.

See the section (below) on Teams in Competitions and Games to understand how Curl Coach handles team lineup changes for competitions and games.

Adding a Game

From the **Competition** page, find the card titled "Games" and tap on "Add". Curl Coach will ask you to provide the game number, information on the game format, the sheet number and stone colour for your team, and allow you to choose an opposition team (either create a new team, select an existing team or skip). If you choose to not select an opposition team, the Curl Coach will ask for a name for the team.

Depending on your options, you can have Curl Coach ask you to select a Venue for every new game (this is useful for Competitions that take place at more than one location).

Once you have provided all of the required information, Curl Coach will ask you if you want to return to the Competition page (so that you can add another game), or Start the Game which will lead you to the Game Information Page.

If you choose the Game Information page, you will be able to edit all of the information about the game, including changing the venue, and changing the team line-up for either of your team or the opposition team.

Managing Teams

It is important to understand how Curl Coach manages teams when they are taken to a competition (or a game) as it effects how shots are attributed for statistical reasons.

How This Effects Stats

Curl Coach attributes every shot to the end the shot was made in and to the player that delivered the shot. In this way, every shot has a specific player credited for that shot, and through the game a specific team and competition that the shot is part of.

This allows Curl Coach to include the shots from the game in the appropriate player analysis, team analysis (both competing team and opposition team), game analysis and competition analysis.

Teams In Competitions

A Team is an item in Curl Coach which is associated with players, competitions, and games. When you select a team for a competition, that competition is added to the team, and a **copy** of that team's lineup (it's players) is added to the competition. At the same time the competition is added to the team's players.

If you choose to change the team then the competition is removed from the old team's as well as the players in the lineup. The competition is then added to the new team, that team's lineup is copied into the competition and the competition is added to each of those players.

Replacing or deleting a player in the the competition (by swiping left on a player), changes the lineup only for the competition does not effect the regular lineup for the team.

In this way, the competition has a record of the team that was competing, as well as any specific lineup changes that were made for that competition, including bring in an alternate, changing the throwing order, etc.

Once you add a game to the competition, it is no longer possible to change the team or the team's lineup.

Teams in Games

In the same way that teams are added to competitions, teams are added to games. When you create a game in Curl Coach there are two teams involved. The team from the competition is always **copied** into the game, and optionally you can choose an opposition team.

If you choose to include an opposition team, then that team is added as the opposition team. That team's lineup is copied into the game to create the list of opposition players, and the game is added to both the team and each of those opposition players.

> *Including an opposition team allows you to harness Curl Coach's powerful analysis to see opposition tendencies with little or no extra work on your part.*

You can change the lineup of either your team or the opposition, dropping to a 3-player team or changing the throwing order, etc. up until you start charting the game. As with changing the lineup for a competition, this changes the lineup for the game only and does not change the original teams in any way.

> *Curl Coach automatically handles 3-player teams by setting the skip/4th or vice/3rd to throw the final stones.*

Charting a Game

When you are ready to start charting, select the game from the competitions page, then either the "Start" button, or the "LiveStones" button. The latter will share the game on LiveStones as you chart. This will show the game chart view with a curling sheet and controls for entering information charting information.

On small displays, these buttons are replaced by a single menu button.

Setting Hammer
The first thing you need to do is set hammer. The bottom right of the sheet has a control to set hammer and is available for the first shot of every end. Once you complete the first shot of an end, hammer cannot be changed.

Automatic Charting
Curl Coach comes pre-configured to assist you with charting. Your instinct might be to figure out what the called shot is and select it, set the turn, shot difficulty, etc. in the charting information. *This is not the recommended way to chart*. Curl Coach includes the ability to automatically set a lot of this information - *if you let it* - and if you do, charting is a lot easier.

As you record what happened on the sheet Curl Coach will determine the turn, estimate the shot type, shot difficulty and the score for the shot. Allowing Curl Coach to do the estimation, will mean, in most cases, you will not have to enter this information at all.

If you manually change any one of these property, Curl Coach will stop updating its estimate for that property until the next shot.

Charting a Shot
Follow these general steps for charting a shot.

(1) Specify the Target
Typically the skip will tap the ice to indicate where the stone is supposed to come to rest, or tap a stone that they want to hit. You tell Curl Coach what the skip intends for the shot by doing the same thing. Tap the ice where the stone is supposed to come to rest, or tap the stone that is being promoted,

displaced or removed. Tap the center of the stone to indicate a hit and stick, or tap one side of the stone to indicate a roll is desired.

(2) Record the Intended Roll
In some cases the skip might indicate where the delivered stone is supposed to roll to as part of a hit If they do, you can record this by double tapping the location where the skip has indicated the delivered stone should finish. This is optional, but can be very useful for post-game discussion.

(3) Adjust the Broom
When you specified the target, Curl Coach will place the delivered stone on the sheet and add a broom. Curl Coach places the broom on the T-line for draws and guards, and next to the target stone for hits. drag the broom to match where it is being held.

(4) Record What Happened
Move the delivered stone as well as any displaced stones to show what happened as a result of the delivery. See "Charting a Hit" (below) for a detailed example.

(5) Review the Shot
Now that everything is complete in the house, review the shot information and make any adjustments that are needed. Once you are happy with the information, tap on **Next** to proceed to the next shot.

Repeat this process for each shot until the game is complete.

Charting a Hit

Charting a hit is essentially the same as charting a draw or guard shot, however it is important that you move the stones in a specific way in order for the shot to be played back correctly and for auto-scoring to function correctly.

Assuming the target stone is hit, the first step is to adjust the delivered stone to place it where the hit occurred. Next, move the target stone to show how it moved as a result of the hit. If the target stone subsequently hit another stone, then move the target stone to where it hit and then move that stone to show how it moved, and so on. Once you have moved the final displaced stone, work backwards to record any roll and to record any additional displaced stones as a result of that roll.

Here is a complete example.

Blue delivers a triple on their vice's first stone (#5), which hits red's #4 stone, causing that stone to hit red's #2 stone and both are removed from the rings. After hitting the #4 stone, the blue #5 stone rolls to make contact with the red #3 stone and also removes, The blue #5 then rolls back to center. This is charted as follows

1. Tap on red #4 stone to indicate a hit
2. Adjust the position of the blue #5 stone to contact the side of the red #4
3. Move the red #4 to hit the red #2 stone
4. Move the red #2 stone to remove it from play. Red #2 doesn't contact another stone, so start working backwards
5. Move the red #4 stone to show where it rolled out of play. Once again, this stone did not displace another stone so work backwards.
6. Roll the blue #5 stone to where it contacts the red #3 stone.
7. Move the red #3 stone out of play, and work backwards again.
8. Roll the blue #5 stone to its final resting position.
9. Check the shot type and shot score before tapping next.

Curl Coach should have identified this as a hit (initially) but then converted it to a double and scored it 100%. On game replay the playback should look natural with hits and rolls as expected.

Recording Misses

Curl Coach includes the ability to record the reason that a shot was missed. Curl Coach displays a list of reasons for you to choose from. You can choose more than one reason if needed. You can also skip providing any miss reason.

There are three ways display the miss reasons list:
1) When you tap **Next** and the shot score indicates a miss
2) When you manually set the score and the value you selected counts as a miss
3) If you tap on the *currently selected* score, no matter what value it shows

The third method allows you to record a miss reason (i.e.: delivered narrow) for any shot, even if it was made despite the error in delivery (i.e. the sweepers saved it).

The miss reasons list has 3 configurations possible "Simple" shows a limited set of common reasons and is likely best for new teams / coaches. "Full" provides all possible reasons that Curl Coach can record, and "Custom" allows you to select precisely which reasons you wish to appear in the list, allowing you to remove reasons that you just don't chart.

Adding Notes

There are several ways to add notes to shots while charting. Curl Coach will automatically add notes in certain situations, i.e. the first shot of a game includes the current time, stones placed without charting, and (optionally) hogged stones. Also the stopwatch can log its results to notes.

Curl Coach supports 'Quick Notes'. Tap on the 'pencil' icon in the notes area to display a list of available quick notes. Each of these includes a label to help you remember it, and a longer phrase that is actually added to the shot note. You can customize this list,

removing existing notes, adding your own and re-arranging them as you see fit.

Notes can also be added by tapping on the notes area and using the keyboard. You can tap on the 'X' in the notes area to dismiss the keyboard.

Key Shots & Timeouts

You can identify any shot as a Key Shot or a Timeout. Timeouts are a special kind of key shot and are treated in the same way by Curl Coach.

You mark a shot as a key shot to make it easier to find at a later time. This allows you to quickly mark shots that you want to spend some time discussing with the team during debrief. Select the "Key" symbol for a regular key shot, to the "Stopwatch" symbol for a timeout.

You can read more about using Key Shots in the sections covering Game Replay and the Dashboard, later in this guide.

Correcting Mistakes

Sometimes during charting we don't get the stones in quite the correct position, remove a stone that didn't actually leave play, or make some other error. Depending on when you notice your mistake, Curl Coach provides a number of different approaches to allow you to correct things.

Moving & Replacing Stones

Before you set the shot target, Curl Coach places any stones that were removed on previous shots behind the backline. At this time you can reposition any stones including those out of play to correct their position.

Once you set the shot target, out of play stones are hidden and any stone you move is considered part of the shot.

Undo

If you have started charting and realize that you have made a mistake in recording how stones moved on the sheet, or where the target was placed, you can tap the undo button (top left corner of the sheet), to undo the last stone movement you entered. Each

tap on the undo button will undo one motion, then undo the roll to (in entered). After all motion has been reset in this way, the target can be changed.

Reset & Delete

The reset option undoes everything so far for the current shot, removing the target, broom, and repositions any stones the way they were at the beginning of the shot. Any shot scoring is also reset. If the target hasn't been set, this option deletes the last charted shot allowing you to re-enter it. This is an extreme option and in many cases can should be handled by using the Review function (see below).

Placing Stones

If you get behind in charting and missed one or more shots for any reason, you can use place stones for the shots you missed. Placed stones are NOT tracked for statistical reasons, they are just a record of where the stones ended up. *Do not use Place Stone as a substitute for actually charting the game.*

In order to place a stone, you need to have completed charting the previous shot (so if you have a shot target and some shot information, either tap **Next** to record it, or tap Reset to discard it. Then tap **Place**.

When you place a stone, the next stone is added to the sheet near the sidelines. You can move the stone to the correct location and move any other stones, then tap either **Next** or **Place** again. If you tap **Next**, the stones on the sheet are recorded and you are ready to record the next shot. If you tap **Place** the stones are recorded and the next stone is added to the sheet and can be positioned.

Changing the Scoreboard

When an end completes, Curl Coach estimates the score based on the position of stones in the rings. This estimate is only as good as the charting and there will be times when a measure is required and the score is not determined right away. This is the one reason that you can change the hammer during the first stone of each end.

If you need to adjust the score, tap on the scoreboard. You can correct the score for any completed end.

Stone Color and LSD

For competitions that record a last stone draw, Curl Coach lets you record who delivered the attempt, the measure, and what rotation they used. In competition reporting you can review the results to ensure your team is following event rules.

This option also allows you to change the stone colour for your team up until the first stone is charted.

Changing Lineups

If a player leaves the game, or a substitution is made, select the "Team Lineup" action from the menu, or tap on the player name.

The Change Lineup pop-up will allow you to remove, replace or swap players from the current shot onward for either team. If you need to adjust the lineup for earlier shots, use the Review function.

Reviewing Previous Shots

If, after charting a shot, you may need to go back and change something. Perhaps the way an end developed means that you want to mark a previous shot as a key shot, or you want to add a note to the last shot, or you need to change the score. In all of these cases, **Review** can be used to modify any previous shot in the game.

When you enter the **Review** page, the most recently charted shot is selected. You can select any shot in any end using the shot selection controls. You can also change the shot type, turn, difficulty, score, notes, and other information for the shot.

If you change the lineup in Review, you can choose to apply those to all subsequent shots in the game.

Often it is quicker to correct a shot using the review page than to deleting and re-entering everything.

Stopwatch

Curl Coach provides a built-in stopwatch function that can log recorded times to the shot notes, and recorded split times can be used for some types on analysis.

Doubles Curling

Charting the Doubles game is similar to charting a traditional game with the following changes.

1) Curl Coach will automatically place the pre-positioned stones before the first shot is charted.
2) Curl Coach will offer the ability to call a power play, and select which side, once per team, when they have hammer.
3) When adjusting the Team Lineup, you can only swap the throwing order. Substitutions and player removals are not permitted.

Live Stats

During charting you can display a quick summary of the performance of both teams in the game. This includes shooting percentages by position and shot type as well as team percentages by end.

Curl Coach also provides an opposition report which (assuming you have previously charted the opposition team) that can give you insights into how the other team may behave as they play against you.

Advanced Charting Options

Curl Coach includes a number of advanced charting options which should only be enabled. These are generally disabled by default, but can be enabled through the options.

End Goals

End goals are available by default in Curl Coach, but with options you can either not chart end goals at all, or force the goal be selected before moving past the first shot. If recorded, end goals are used for a number of stats in Curl Coach.

Strategy Score

Charting strategy allows you to record information not only about the team's technical execution (shot making), but also about the decision making process. If enabled, the Strategy Score defaults to 100% for every shot. You can set it to other values, and if you do you can select one or more of the strategy miss reasons to identify trends and guide discussions.

Game Impact

Pioneered by Adam Kingsbury, game impact lets you record the effect of each shot on the ability of the team to win the end and / or win the game. Each shot is recorded as "harmful", "neutral" or "helpful". (- / = / +) and post game analysis can show how many harmful shots are acceptable while still achieving ones end goal / overall victory.

Plus/Minus Misses

Plus/Minus misses allow you to record the degree of miss for weight and line calls. When enabled the miss reasons change to include a range of values rather than simple light / heavy options and Curl Coach can automatically set the weight reason based on weight zones.

Thrown (Red) Broom

If a stone is delivered in such a way that it is significantly off the line (missing the broom by a large amount), it can appear in replay that the wrong turn was thrown, or some other problem occurred. You can include this information while charting by indicating the "thrown broom".

Press and hold on the broom for several seconds. when you do this a second broom (coloured red) will be added to the sheet. Now drag the broom left or right to indicate the line the stone was actually delivered along. This second broom can only be moved left or right, and not up or down the sheet.

Tolerance

When you enable tolerance charting, you can optionally add a tolerance box to the sheet for each shot. The box can be resized by using a two finger pinch gesture to indicate the amount of line and weight tolerance, and can be dragged to show where the acceptable shot tolerance lies.

Curl Coach includes Tolerance specific analysis, including summarizing the kinds of tolerance the team is calling as well as a "strike zone" style diagram that shows where the team is throwing w.r.t. in tolerance.

Replaying A Game

One of the most powerful tools in Curl Coach is the ability to replay any game after it is completed, stop at important shots and discuss alternate shots, risks, and the decision making process. To replay a game, select it from the Competitions page then tap on **Replay**.

On a small screen replay is shown as a "play" icon

Replaying an Entire Game

You can start playback of the game by tapping on the play button, or tapping on the curling sheet. Play will progress shot by shot until a key shot is reached at which point the playback will automatically pause. There is a slight pause after each end after which the sheet will rotate and playback will continue. When the last shot has been completed a message will display indicating the end of the game.

As you play the game, the player name, shot type and shot execution information is displayed next to the sheet. The default behaviour is to display the shot information but NOT the execution information and pause before animating the shot, then the execution information is presented as the shot animates.

Selecting a Shot

At the bottom of the shot information area, a set of controls allows you to select the current end. If an end includes a key shot or timeout then that is indicated by showing a key or stopwatch behind the end number. Similarly there are controls that allow you to select a specific shot. Shots are also marked as a key shots (or timeouts). This makes it very easy to find important shots for discussion between games.

Another feature of the shot selector is miss-response bracketing. Shots are paired (an opposition shot then your team's shot). For each shot, a miss has a red border while a made shot has a blue border. This aids in discussing strategy around at how your team responds to a miss. Do they select simpler shots to create an advantage or high difficulty shots, that they then tend to miss?

Before and After

You may want to talk about a shot and the result of what happened. In these cases you can quickly switch between the sheet before the shot was delivered and after. Tap on the play button with a vertical line. This button flips to indicate that the next tap switches to either the beginning of the shot or the end.

Annotations

You can sketch on the sheet to illustrate your discussion. Tap on the paintbrush button (top right of the curling sheet) to display a palette of options. Draw lines, arrows, regions, add curling stones, targets, blocks, and brooms, and even add text labels in one of 6 colours. When you are done, tap the brush again to hide the palette. Changing to a different shot, or playing the current shot clears the annotations.

Copy to Strategy Book

If, during shot discussions, you want to illustrate different responses to a particular situation, you can copy the shot to the strategy book. When copied, the current shot is included as a tactical response. Any annotations are included and you can now add tactics to to illustrate other responses to the situation.

Connecting to a TV

When you iPad is connected to a TV with screen mirroring enable, an alternate layout is shown on the TV that takes advantage of the size of the screen. An AirPlay button appears next to the menu button which can be used to toggle the TV display.

Looking at Stats

Curl Coach presents curling stats in several ways, however the primary two methods are PDF reports and the interactive **Dashboard**. The two are closely related because the dashboard can be used to create custom PDF reports that include just the content you care about.

The Dashboard

The dashboard can be accessed from any of the **Players**, **Team**, **Competition** or **Game** pages. Depending on where you start from, the dashboard generates its content from a different perspective.

If you start from the **Players** page then the dashboard starts with a list of all players in your database and generates results based on every shot the selected player has recorded. Start from the **Team** page and you see a list of teams, and the results are based on all of the games that team was included in. Start from the **Competition** page and see only the games for the selected competition.

Focusing the Analysis

From wherever you start, you can see an analysis of "all of the data" or you can focus and narrow the shots included. Let's show a hypothetical example.

1) Start Dashboard from Teams.
   The dashboard shows results based on every game that team has be part of.

2) Select a specific competition from the list the team has entered.
   The dashboard shows results for the team in that specific competition.

3) Select a game within the competition.
   The dashboard shows results for the team in that specific game.

4) Select a player at that game
   The dashboard shows results for the player in that specific game.

Filtering By Date

When a team or player's career extends over more than one season, it may be important to look only at the data for a specific period of time. In Options, Curl Coach includes settings to exclude data before a specific

date and/or exclude data after a specific date. These dates only apply to the analysis of **Players** and **Teams**. **Competition** analysis always includes every game in the competition, while **Game** analysis always includes every shot in the game.

Searching

The **Dashboard** provides the ability to search for shots. The search ability allows you to match shot types, miss reasons, even search shot notes. For the matching shots the dashboard can display an animated replay of any of the shots.

PDF Reports

As mentioned earlier, Curl Coach can generate PDF reports of the analysis it does. There are two ways to access these reports.

1) From the various pages (**Player**, **Team**, **Competition**, **Game**) you can ask Curl Coach to generate the standard report for that type. These reports are pre-configured to include specific sections, and you can choose to exclude any section through options.

2) The **Dashboard** itself contains an item "Report This" near the top of every section. By selecting this item, you can choose which of the pages in the section should be included, and generate a PDF for that specific analysis.

While most analysis can be included in a PDF, some cannot (For instance, "Response to a Miss" is designed to replay the miss and response shots in and is never included in a PDF).

Best Practices

The **Dashboard** contains a huge number of ways of looking at the data for your players/teams and opposition players/teams. As a result it can be overwhelming to try and deal with all of the available data. The best teams focus on what matters for them right now and not worry too much about the rest of the data. Here are some suggestions on how to get the most out of the stats that Curl Coach makes available.

Look At Everything

While this sounds like the opposite of focusing, it isn't. Start by spending some time at the beginning of the season going through all of the reports that Curl Coach presents for your previous season. If this is a new team then do this after 1-2 competitions have been completed. Make sure you understand what you are seeing in the data. The purpose of this process is several fold:
1) Remind yourself of what information is available
2) Look for data that is contrary to you assumptions about the team - these assumptions may be wrong, the data is likely right.
3) Identify where your team is strong, and where they are weaker.

Focus

Once you have been through the data, note the areas where your team is strong, and choose 3-4 areas where an improvement will give the greatest rewards. Perhaps there is a shot that your team calls often, but struggles with, or difficultly with inside-out shots. Whatever the issue, choose the analysis in the **Dashboard** that lets you monitor those issues.

Baseline & Address

Record where your team is currently and take actions through strategy shifts, practices, etc. to improve the results. Monitor the **Dashboard** so you know if you are having a positive effect. Monitor the team's areas of strength to ensure performance doesn't decline.

Look At Your Opposition

If you compete against the same teams multiple times in a season, look at the opposition's performance, particularly in areas where you are strong (do you have an advantage you can exploit) or weak (how to defend).

Repeat

Several times over the season, revisit your team's situation to identify whether enough improvement has been achieved to merit shifting focus to something else.

LiveStones & Sharing

LiveStones lets you to stream games as you chart, share games after they have completed, or share information about venues. To use **LiveStones** you need an account and a subscription.

Sharing

Curl Coach allows you to export players, teams, venues, drills, strategy situations, and competitions. These can be shared with other Curl Coach users. When you choose to export you can can AirDrop to another iOS device or attach the export to an email and send it. In order to import, the person who receives it must have Curl Coach.

Creating an Account

You can create a **LiveStones** account from the "Manage LiveStones" page. Tap on the "Sign In" button and then select "Create" and follow the steps.

If you need to reset your password, select "Forgot Password" and follow the steps. You will be sent an email with a reset pin that you can use to set a new password.

In general there is no need to sign out of **LiveStones**. Curl Coach will open and close its connection to the server when needed and resume your previous session. If you do sign out, LiveStones will prompt you to sign in before you can continue.

Live Charting

When you start charting a game, and pick the **LiveStones** option, Curl Coach will connect to the server and start streaming the game as you chart. All of your charting information (excluding shot notes - they remain private) are included in the replay on the web. Games can be followed by visiting livestones.curlcoach.com

Notifying Fans

On the Team page you can add the email address of any fans that you wish to notify when **LiveStones** streaming is started. If provided, when you start a game, the email addresses are sent to the server and used to send an announcement email to each address. Once the emails are sent, the server discards the addresses (they are not saved)

Status & Chat

During streaming a "chat" icon is added next to the menu button at the top of the screen. This icon will be blue when the server is connected and streaming is progressing normally. It will change to green if someone who is following along posts to the chat for the game. It will change to red if the network connection has been lost.

If the connection is lost, **LiveStones** will automatically re-connect and sync with the server to deliver all missed shots.

You can tap on the chat icon to read any messages and add your own.

Deleting Games

In the Manage LiveStones page you can see all of the competitions and games you have shared and can delete them. Deleting them from **LiveStones** does NOT delete them from your device.

Sharing and Finding Venues

If you have a LiveStones account you can search for **Venues** by name or location. Once found, you can download it and it will added to the venues you have available.

The Venues available on **LiveStones** were shared by other coaches using Curl Coach. It is highly recommended that you provide full details for your home club and share it to **LiveStones** so that other coaches can benefit from current information.

Strategy Book

The Strategy Book takes real-world situations from the games you chart, or custom situations you create and allows you to explore different responses to those situations. You can organize situations into chapters, add notes, and create PDF strategy books.

Situations & Tactics

The Strategy Book works with two key terms. A "Strategic Situation" or Situation is a collection of stones on a curling sheet along with some information in the form of notes (what colour is throwing, which end, what the scoreboard is, etc.). The second term is "Tactical Response" or Tactic, and it is a specific shot (target, broom, shot type, notes, etc.) in response to the Situation. Situations can have more than one Tactic.

Chapters

The Situations are organized into chapters. Some chapters are built-in, and you can create your own. Tapping on a chapter name opens or closes the chapter. There is one chapter called "All" which contains every situation. You can move situations from one chapter to another. Tapping on a situation selects it, and populates the rest of the cards on the page, primarily the list of **Tactics** and the diagram. By swiping left on a situation you can edit or delete it.

Flags

Each situation can be assigned flag from one of 7 colours. You can then filter the list to show Situations that match that colour. This aids in focusing on selected situations.

Strategy Time

When you create a new situation you can start from a blank sheet. Alternately use **Strategy Time** to quickly build randomized situations. You specify the end number, the length of the game and the minimum number of delivered stones. You can also adjust the likelihood that a delivered stone will end up in one of 4 weight zones (high guard, tight guard, above the T-line, or behind the T-line). These can be set for each of the lead, second, third and forth stones.

Strategy Time generates a situation and allows you to add, move, or reposition stones. Then add tactics to explore the situation. **Strategy Time** is based on work by Peer Allen (used with permission).

Adding Tactics

Tactics are added to the situation by selecting a shot type, stone colour and adding a target, broom and motion in the same way as charting a game. You can have as many tactics included as you wish. Each tactic can also have its own set of annotations to illustrate rock paths, control area and so-forth.

Strategy Book Exports

The **Strategy Book** allows you to select specific situations and share them with other users. You can generate PDF Strategy Books from selected situations which include a page that shows the situation itself and then a page for each tactic. Tactic pages include the shot diagram as well as areas for the coaches notes and hand written athlete notes.

Connecting to a TV

When you iPad is connected to a TV with screen mirroring enable, an alternate layout is shown on the TV that takes advantage of the size of the screen. An AirPlay button appears next to the menu button which can be used to toggle the TV display.

An extra card will appear when the TV is enabled that allows you to control which elements of the situation (annotations, notes, etc.) are shown on the TV. This gives you a lot of control over how the Situation is presented and how you drive the discussion.

Curl Coach includes an extensive collection of Drills, originally based on Sean Turriff and John Rudd's compilation of Curling Drills with some additional drills added over time.

Built-In Drills
Curl Coach comes with over 30 built in drills. These drills cannot be modified or deleted and are shown with a ' 🔒 ' icon next to the title. If you want to modify a built in drill, first duplicate it and modify the duplicate.

Creating You Own Drills
You can create your own drills from by tapping on the **Create New** button and providing the basic information, then customizing as needed. Below are some guidelines for the information you should consider including.

Scoring
Select one of the 4 scoring approached. **Rings** and **Time** have pre-set scoring rules to which you can add a note. **Team** is used when the score is a group result for the players in the practice, and **Solo** is used when each player is scored independently.

Developed Skills
Select all skills from the list that apply, If needed, you can add your own skill to the list using the **Add** button.

Resources
If your drill requires any special resources in order to run the drill (some examples might include stop watches, 2 sheets of ice, or pylons/cones), select them from the list of provided resources or **Add** your own.

Setup
Describe any setup required for the drill. This may be a simple reference to the diagram, or something short like "take two stones to the far end of the ice", or more involved setting up pylons / targets, etc.

Instructions
Provide a description of how to run the drill, the procedures the athletes should follow, and how the results should be observed.

Variations
Describe ways that the drill can be modified to make it harder, or easier, handle a different number of players, or different kind of player (for example wheelchair curlers).

Diagram
The diagram is optional. but is a very good way to explain any setup requirements and/or illustrate how the drill should be run. You illustrate a drill using the same tools used for annotating shots by placing lines, arrows, zones, stones, targets, markers and brooms on the ice using any of the available colours.

If your drill has no diagram showing, select **Edit** in Drill Info to add the diagram, then select **Edit** on the diagram itself.

Sharing Drills
Like many things in Curl Coach you can share drills with other users. Select export drill from the menu and either AirDrop to another coach or send it by mail.

Drill Handbook
Curl Coach can also generate a PDF of the drills in that includes an index (by skills) and a page for each drill with diagrams etc. Select "Drill Handbook" from the menu.

Practices

Curl Coach includes comprehensive support for planning and running group, team and individual practices.

Creating a Practice

There are several options available for creating a new practice.
1) From the team page tap on **Add**
2) From the practice page, tap on **Create New**
3) Select an existing practice, then select 'Duplicate' from the menu
4) Select 'New from template" from the menu

In the first two cases, answer the prompts to provide information for running the practice. In the latter cases, a practice is created for you based on a previous practice / template (see templates below). If you create a practice by duplicating an existing practice or using a template, it is give the current date and time as the practice time.

Once you have the basic practice created you may need to add or modify the drills to include in the practice. Curl Coach has a number of tools to help you select practices for the available ice time.

Practice Templates

A practice template can be a created choosing the "Save to Templates" menu. Templates capture the venue, team / players and drills. You can use a template as a starting point for future practices.

Selecting Drills

Along the bottom of the Practice page is the list of drills to be included in your practice. Curl Coach automatically includes a warm up and cool down/debrief for your practice (but does not show them). You can drag drills to change the order, or press and hold to access a pop-up menu that allows you to add additional drills, delete them, and edit the drill in order to change its duration and select the specific drill to use for that part of the practice.

When selecting a drill you can see the top miss reasons for the team or any player in the practice. You can set filters to isolate drills that help to develop those skills, and you can customize the setup and drill time and record key observations for each drill.

Time Machine

Time Machine is a special drill that is included with Curl Coach. Time Machine lets you select a Situation from your Strategy Book as the diagram. The built in version of Time Machine suggests that you practice various tactics as responses to the situation and discuss which ones work best for your team. As with any other drill you can make a copy of Time Machine to create your own drill that is to be paired with a Situation.

Practice Plans

You can generate a PDF of your practice that includes the plan itself, notes pages and optionally the included drills, as well as the EAP for your venue. If you include all sections and an EAP, the practice plan is compliant with NCCP submission guidelines.

Running a Practice

There are two options for running a practice. Generate a printed practice plan and record your observations on paper, or run the practice using Curl Coach. If you take the former approach you can enter the notes and scores into after the practice.

If you use Curl Coach, you will be stepped through the practice provided with tools to keep the practice on-track, including:
1) Clocks for the current drill and practice.
2) A stopwatch & 6-sided dice simulator
3) The drill diagram and instructions
4) Places to record individual and team scores and notes.

After a practice has been completed it can be reviewed.

Acknowledgements

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Strategy Time is adapted from the JavaScript source for the Strategy Situation generator developed by Peer Allen, used with permission.

Beta testers were invaluable in providing feedback and suggestions throughout the development process. Many thanks to the patient feedback from Blaine Malo, Art Leganchuck, Jennifer Cuddie, and Richard Hawkins.

Curl Coach 2 is a complete re-write of the original Curl Coach including features suggested by many coaches to name from around the world. You know who you are. My thanks to all of you.

- Stephen Orr

Change History

Curl Coach 2 is a complete re-write of the original Curl Coach, and by complete the new version was written in Swift while the original Curl Coach is in Objective-C. Curl Coach 2 includes almost all of the features of the original, however in some cases options have been removed where they no longer made sense. In addition Curl Coach 2 includes a large number of new features.

Version 0.8.4

New Features
• "Sub" a player on Game Page / Change Lineup pop-up, to quickly pick an alternate from the team.

Resolved Issues
• Creating a game for a team with alternates now excludes the alternates from the lineup.
• Changing player positions on Game page no longer allows "alternate" position to be selected

Version 0.8.3

New Features
• Changing the date range for reporting is now reflected in the dashboard in real-time

Resolved Issues
• Starting a LiveStones stream was unreliable
• Couldn't select a date before Jan 1, 2000
• Player dashboard incorrectly labeled "Shots Thrown" as "Ends Played"
• Switching to a 3-player team did not show player names

• LiveStones server error when deleting a shared competitions
• LiveStones server error when sending game start emails to fans

Version 0.8.2

Resolved Issues
• Selecting text entry areas for login / password, etc. is now easier
• Fixes incorrect background colour for 'PIN' entry field during reset password

Version 0.8.1

New Features
- Tactic specific notes were not shown when selecting a tactic in Strategy Book
- Move Strategy Situations to a chapter in batches by selecting them then tapping move
- The selected Situations are reset after moving or flagging them
- When adding Tactics to a Situation the stone colour no longer resets each time

Resolved Issues
- Long player names could be truncated in Game Chart / Replay / Edit
- Hammer was not shown in the first end of Game Replay
- End hammer (rather than lsfe hammer) now shown in Game Replay

- Selecting the final shot of an end and tapping Play would move to the next end
- Selecting before / after shot during playback could cause odd stone animations
- Fixes an issue in Replay & Review where an extra end was hidden for some games imported from Curl Coach
- Corrects the styling of buttons in the Strategy Book to be consistent
- Corrects an issue where a new strategy situation could be hidden in the Stratgey Book
- Corrects an issue where the stone colour in a Tactic could become swapped

Version 0.8

Initial release