



Scottish Hockey Stopwatch Documentation

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1 Starting a new Game

1.1 Loading Player Data

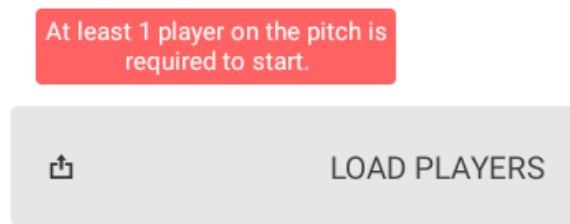
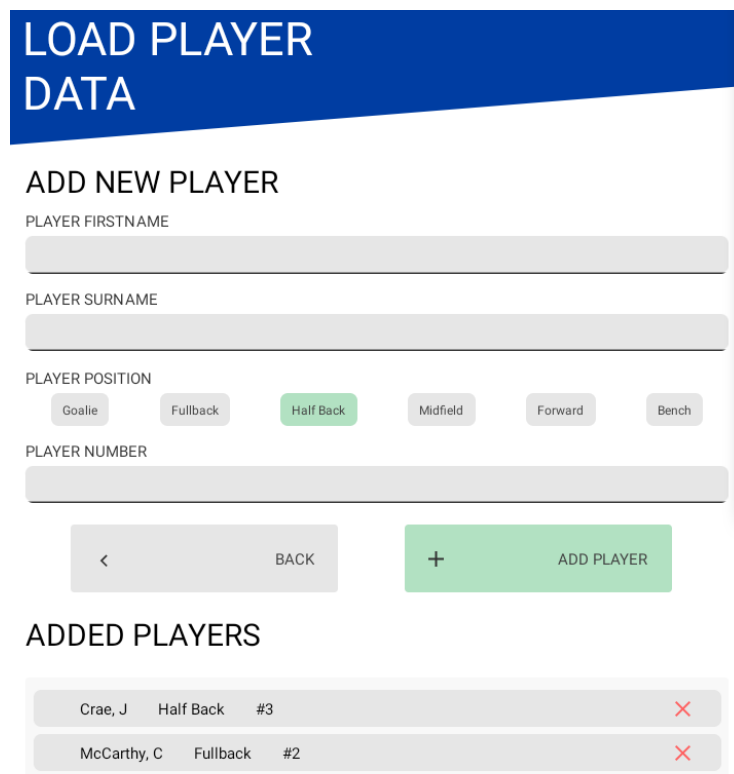


Figure 1: First time, no players exist

Upon launching the app for the first time (Figure 1), it is necessary to add the details of players for the upcoming game. The **LOAD PLAYERS** button can be used to navigate to the *LOAD PLAYER DATA* screen (Figure 2).



ADDED PLAYERS			
Crae, J	Half Back	#3	✕
McCarthy, C	Fullback	#2	✕

Figure 2: Loading players

Here, information for each player can be entered. The player position is the position which the player starts the game in. Where there are 2 or more players in the same position category, players will be positioned left to right.

After adding a player, a card will appear in a list at the bottom of the screen. To remove an added player, simply tap the corresponding card.

After all players for the game have been added, the **BACK** button should be used to return to the *HOME* screen. Please note at least one player must be positioned on the pitch before starting a new game.

1.2 Loading Players' Data Added Previously

All player data is saved when it is added.

When re-loading the app, this data must be re-loaded. This is done by navigating to the *LOAD PLAYER DATA* screen. The previously-added players will be present in a list at the bottom of the screen. Players can be removed by clicking on their card.

1.3 Starting the Game

Once player data has been loaded (requiring at least one pitch player), the **START GAME** button on the *HOME* screen should be used to start the game (Figure 3).

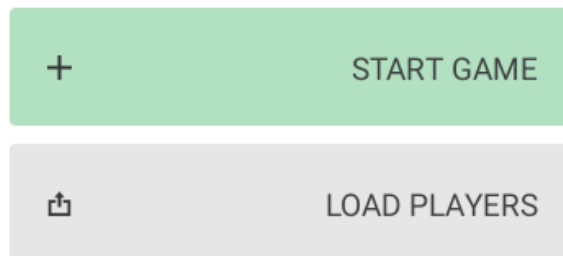


Figure 3: Starting the Game

2 During a Game

2.1 The Control Bar

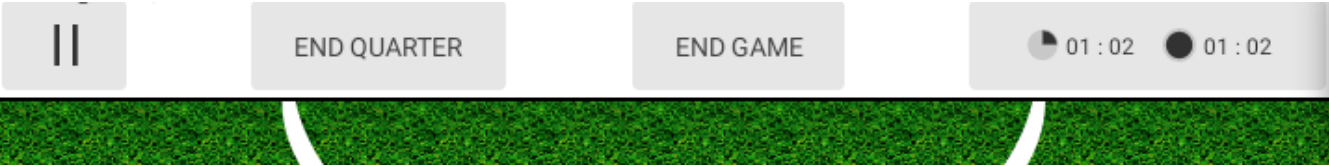


Figure 4: The Control Bar

The Control Bar is positioned at the top of the screen (Figure 4). It consists of two main sections. The first section consists of buttons to control the game. Initially, the **START GAME** button should be used to start all timers. The game can be ended at any time using the **END GAME** button. The game can also be paused/resumed for any stoppages in play, and quarters can be ended/started as expected.

The second section contains the quarter timer and the full game timer. The first of these displays the total elapsed time of the current quarter, excluding any time the game was paused. The full game timer displays the total elapsed time for the whole game, across all quarters so far, again excluding any time the game was paused.

2.2 The Pitch

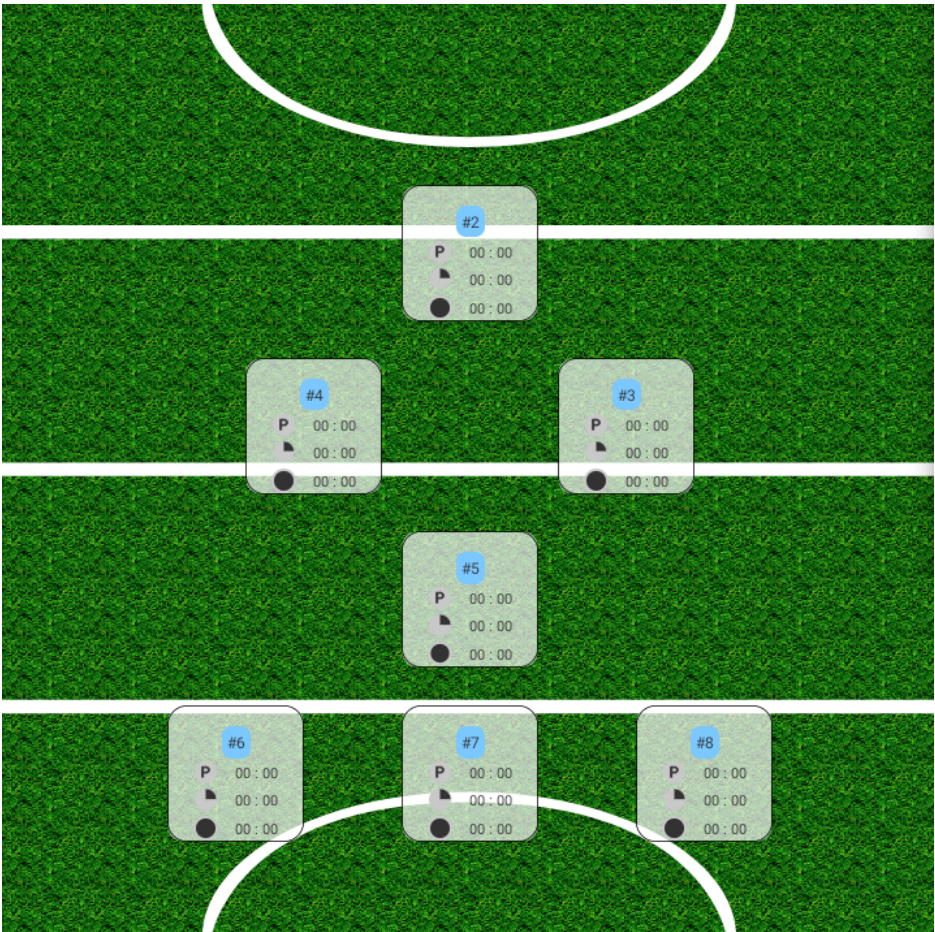


Figure 5: The Pitch

Added players are aligned in rows on the pitch (Figure 5) according to their position (Goalie, Forward etc.). Each player is represented by a box containing the corresponding player number, and three timers. For players on the pitch, the first timer, labelled *P*, displays the total time the player has been playing on the pitch since last moving there (either the start of the game, or a substitution). The second timer displays the total time the player has been playing on the pitch in the current quarter, while the last timer displays the total time the player has been playing on the pitch throughout the whole game.

To make a substitution between a pitch player and bench player, the player on the pitch should be **pressed first**. The desired player on the bench should then be pressed to complete the substitution. If a player is accidentally pressed, simply press again to de-select. Substitutions can be made at any time - before the game starts, when the game is running, when the game is paused, between quarters.

2.3 The Bench

The bench (Figure 6) is located at the bottom of the screen. Players on the bench are displayed horizontally, and **can be scrolled** through. They are sorted by their player number. The first timer for bench players is different. It displays a *B* symbol, and shows the total time the player has been sitting on the bench since last moving there (either the start of the game, or a substitution).



Figure 6: The Bench

3 Game Summary

3.1 Summary Screen

The summary screen is displayed after the game has ended. It shows information about the time for each quarter, and the whole game, as well as information on each player. Each player has a bar. The bar is split into four sections, representing each quarter of the game. A red portion of each bar is filled to represent the time the player was on the pitch during the corresponding quarter.

3.2 Exporting Game Data

The **EXPORT DATA** button should be used to export the data collected from the completed game. A spreadsheet is created, which can then be saved or shared. Data for each player is displayed under the following headings, where all times are in seconds: playerFirstName, playerSurname, playerNumber, quarter[1 through 4]/Time, totalTime.