

Automated Commentaries for Simulated Soccer

GUI Design

| | |
|----------------------------|------------------------------|
| Audience | All |
| Author | Ahsan Mussa |
| Scope | Design |
| Date Created | 23/02/2007 |
| Version Number | 0.1 |
| Version History | 0.1 – Original Document (AM) |
| Reviewed | Yes |
| Last saved by , 15/03/2007 | |

Sign-off sheet

Date: 03/03/2007

Document Author Signature: AM*

Document Author Name: Ahsan Mussa

Quality Assurance Signature: AS*

Quality Assurance Name: Akbar Sherwani

Project Manager Signature: AM*

Project Manager Name: Ahsan Mussa

* By signing this document you approve that the entire contents of the deliverable has been reviewed and is in line with the objectives of the project.

GUI Design

Introduction:

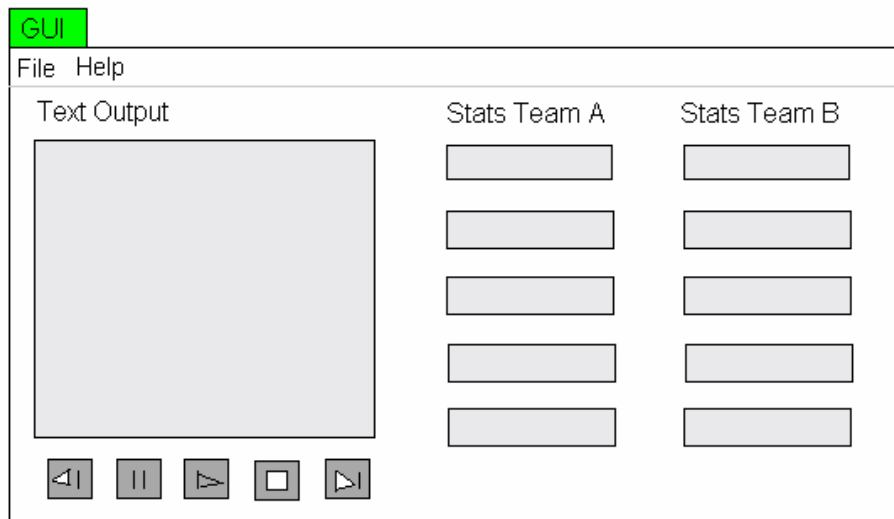
The Graphical User Interface (GUI) will be used as a visual aid for the end-user to view information easily from the match. The GUI will contain the text version of the commentary spoken and statistical information regarding the state of the game. The GUI will be the main form of interaction the end-user has with the game.

The GUI will be created in a manner which will be easy to use and understand. It will comply with the rules and regulations mentioned in the Disability Discrimination Act 1995.

The creation of the GUI involved designing various prototypes that would work best with information I needed it to convey. There were four version changes that occurred, which are shown below.

Version 1.1

The first prototype for the GUI consisted of the basic design with the information that was required. In this initial design I concentrated on the structure of how the GUI would look like and features that the user can interact with, such as the buttons below the text output.



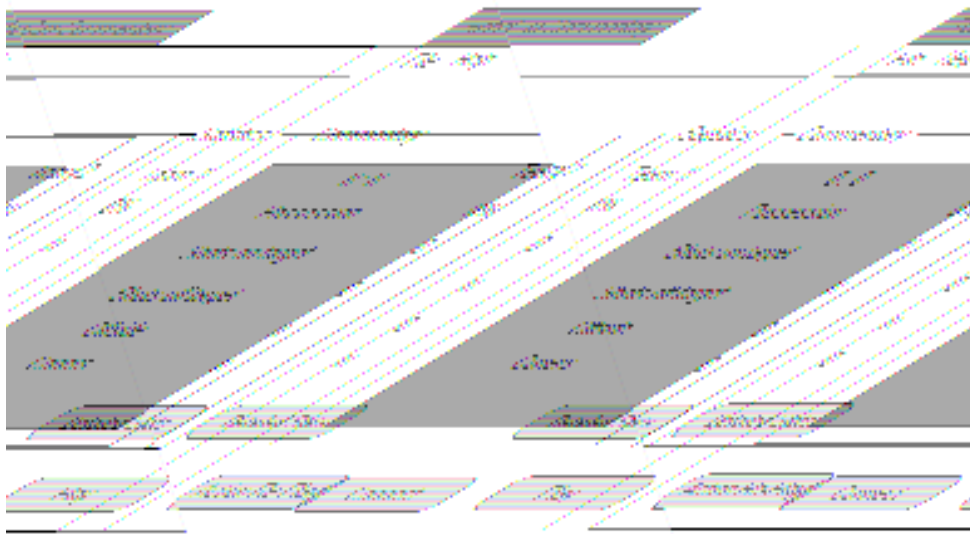
Version 1.1

Automated Commentaries for Simulated Soccer

Version 1.2

The second prototype of the GUI consisted of displaying all the information that was required. Particular attention was given to the style and display of information in the GUI enabling it to be user friendly. The GUI also has various buttons for interaction with the game, where the end-user can connect to the monitor and play the game. An 'Action Re-Play' button has been created for the end-user to view past goal information and 'Detailed Stats' button gives the end-user the ability to view further statistical information on either teams.

However from the first version buttons to stop, play and forward the commentary have been removed as they were not necessarily needed and would have caused added complexities.

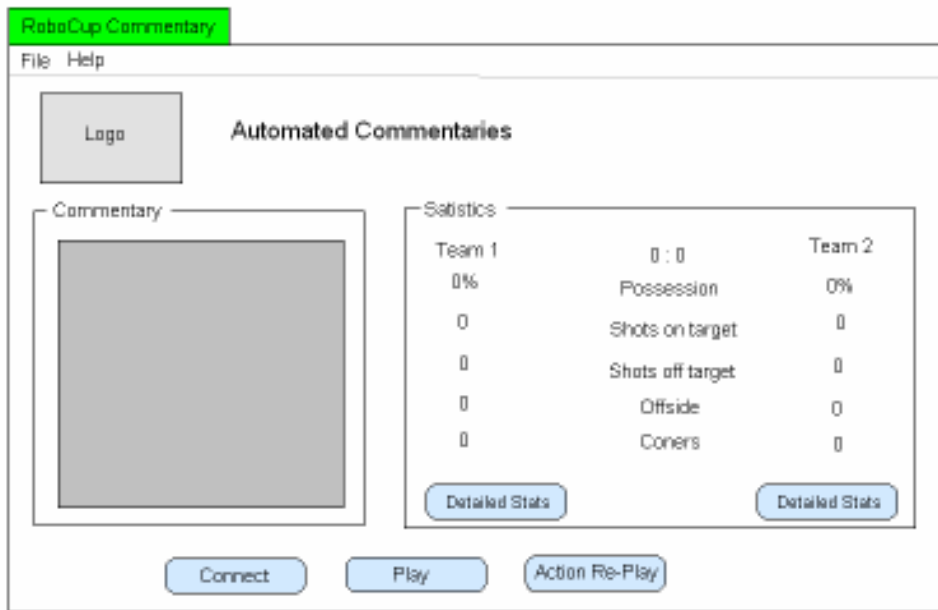


Version 1.2

Automated Commentaries for Simulated Soccer

Version 1.3

The third prototype consists of all the main functionality of the second prototype with the added features of a logo and title of our project. This would enhance the appearance of our GUI and give it a more professional look and feel.

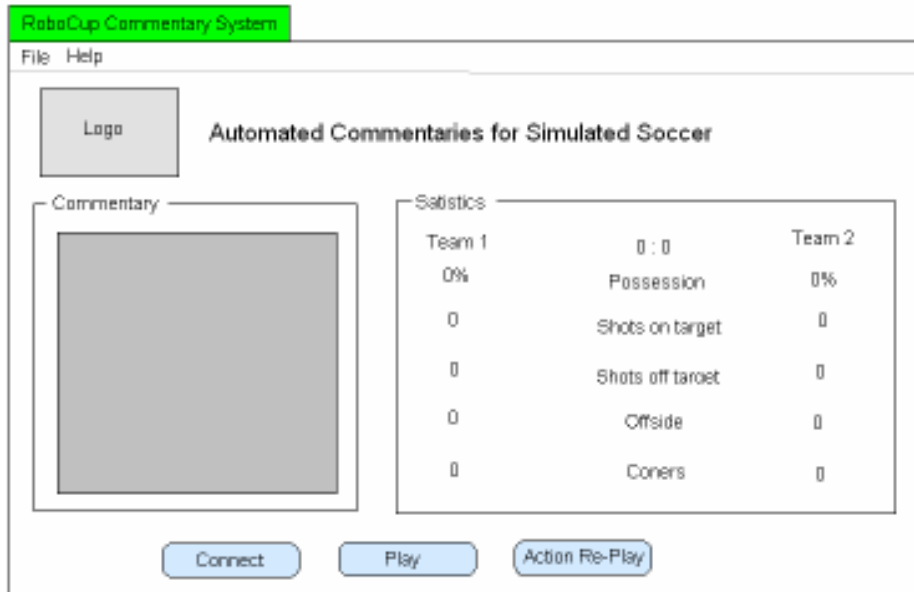


Version 1.3

Automated Commentaries for Simulated Soccer

Version 1.4

The fourth prototype consists of the 'Details Stats' buttons removed as the detailed statistical information would now be displayed continuously throughout the game when the GUI is opened.



Version 1.4

GUI.java

The GUI class gives our system an interface consisting of windows, menus, buttons and other graphical components. All GUI programming was done in Java through the use of dedicated standard class libraries, mainly AWT and Swing.

I went to the thought process of identifying some key principles before coding the GUI these were:

- What kind of elements can we show on screen?
- How do we arrange those elements?
- How do we react to user input?

There were three main concepts I used to create the GUI, which were components, layout and event handling.

Components are the individual parts that a GUI is built from. They are things such as buttons, menus, menu items, checkboxes, sliders, text fields, and so on.

Layout deals with the issue of how to arrange the components on screen. I split the container for all the widgets into different panels of North, East, South

Automated Commentaries for Simulated Soccer

and West. This allowed me to define accurately where I would like to place the information on the screen. Further panels were added to each area to allocate for further information to be displaced in that particular area on the screen. The other aspects of layout that I took into consideration were screen resolutions, different fonts, user resizing windows and use of colour.

Event handling refers to the technique used to deal with user input. Once the components have been created and positioned on the screen, there is something that has to happen when the user clicks a button. The java library – Action listener, generates an even when the user clicks a button, where notification is received and appropriate action is taken.