



University of Glasgow | School of
Computing Science

MSC INFORMATION TECHNOLOGY /
SOFTWARE DEVELOPMENT

TEAM PROJECT - 2014-15

Assigning Referees to JavaBall Matches

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1 Assumptions

- Although it is not explicitly stated in the specifications, we were informed that once a referee has been allocated to a match within the system, users should be prevented from deleting that referee.
- We have assumed that once a match has been allocated to a certain week, it should not be possible to override that match.
- We have assumed that a referee can be allocated to up to 52 matches within the system (independently of the amount of allocations they are given in the input file or from the GUI).

2 Functionality

The program meets all the specifications.

3 Screenshots

Figure 1: Allocate Referees to the match Week 1, Junior, Central

The screenshot shows a window titled "Javaball Referee Selection". It has two main sections: "Allocate Referees" and "Search for Referee".

Allocate Referees section:

- Week Number (1-52):
- Match Location: ☐ North ☐ Central ☐ South
- Level: ☐ Junior ☐ Senior
-

Search for Referee section:

- First Name:
- Last Name:
-

Referee Allocation Results:

Below the sections are two tabs: "All Referees" and "Allocated Referees". The "Allocated Referees" tab is selected.

The referees allocated to the match are:
Tim Toms and Dave Gray

The referees which are suitable for the match are:

Tim Toms	Allocations: 3
Dave Gray	Allocations: 4
Kenneth Lindsay	Allocations: 12
Jack Low	Allocations: 2
Denis Montague	Allocations: 3
Kenneth Lorrimer	Allocations: 6

At the bottom are three buttons: "View allocations charts", "Add referee", and "Save and Exit".

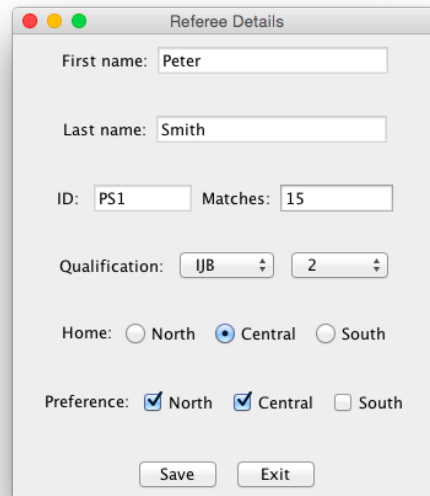
Figure 2: Add a referee called Peter Smith

The screenshot shows a window titled "Referee Details". It contains the following fields and controls:

- First name:
- Last name:
- Matches:
- Qualification:
- Home: ☒ North ☐ Central ☐ South
- Preference: ☒ North ☐ Central ☐ South

At the bottom are three buttons: "Add", "Clear", and "Exit".

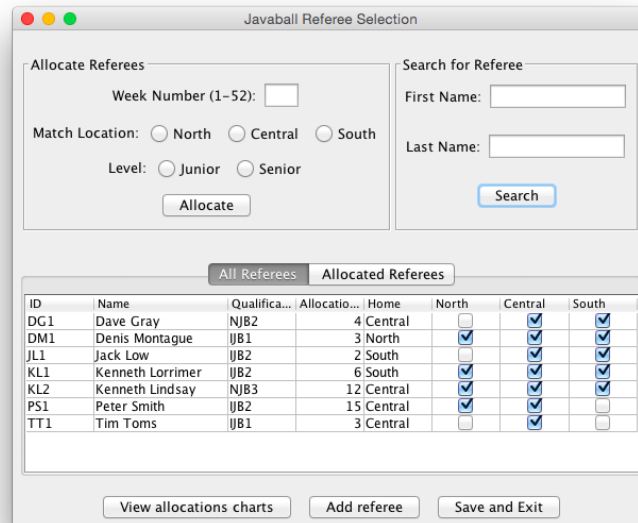
Figure 3: Update Peter Smith's qualification, home location and preferences



A dialog box titled "Referee Details" with a standard macOS window header (red, yellow, green buttons). It contains the following fields and controls:

- First name:
- Last name:
- ID: Matches:
- Qualification:
- Home: ☐ North ☒ Central ☐ South
- Preference: ☒ North ☒ Central ☐ South
- Buttons: Save, Exit

Figure 4: Display the list of all referees



A window titled "Javaball Referee Selection" with a standard macOS window header. It contains the following sections:

- Allocate Referees:**
 - Week Number (1-52):
 - Match Location: ☐ North ☐ Central ☐ South
 - Level: ☐ Junior ☐ Senior
 - Allocate button
- Search for Referee:**
 - First Name:
 - Last Name:
 - Search button
- Referee List:**
 - Tabs: All Referees, Allocated Referees
 - Table with 8 columns: ID, Name, Qualifica..., Allocatio..., Home, North, Central, South
- Buttons:** View allocations charts, Add referee, Save and Exit

ID	Name	Qualifica...	Allocatio...	Home	North	Central	South
DC1	Dave Gray	NJB2	4	Central	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
DM1	Denis Montague	IJB1	3	North	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
JL1	Jack Low	IJB2	2	South	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
KL1	Kenneth Lorrimer	IJB2	6	South	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
KL2	Kenneth Lindsay	NJB3	12	Central	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
PS1	Peter Smith	IJB2	15	Central	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
TT1	Tim Toms	IJB1	3	Central	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Figure 5: Search for Peter Smith

The 'Referee Details' window displays the following information for Peter Smith:

- First name: Peter
- Last name: Smith
- ID: PS1
- Matches: 15
- Qualification: IJB
- Level: 2
- Home: Central (selected)
- Preference: North (checked), Central (checked), South (unchecked)

Buttons at the bottom: Edit, Delete, Exit.

Figure 6: Delete Kenneth Lorrimer

The 'Javaball Referee Selection' window includes the following sections:

Allocate Referees:

- Week Number (1-52):
- Match Location: North, Central, South
- Level: Junior, Senior
- Allocate button

Search for Referee:

- First Name:
- Last Name:
- Search button

Referee List:

ID	Name	Qualifica...	Allocation...	Home	North	Central	South
DC1	Dave Gray	NJB2	4	Central	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
DM1	Denis Montague	IJB1	3	North	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
JL1	Jack Low	IJB2	2	South	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
KL2	Kenneth Lindsay	NJB3	12	Central	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
PS1	Peter Smith	IJB2	15	Central	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
TT1	Tim Toms	IJB1	3	Central	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Buttons at the bottom: View allocations charts, Add referee, Save and Exit.

Figure 7: Allocate referees to the match Week 2, Senior, North

Javaball Referee Selection

Allocate Referees

Week Number (1-52):

Match Location: ☐ North ☐ Central ☐ South

Level: ☐ Junior ☐ Senior

Search for Referee

First Name:

Last Name:

The referees allocated to the match are:
Kenneth Lindsay and Peter Smith

The referees which are suitable for the match are:
Kenneth Lindsay Allocations: 13
Peter Smith Allocations: 16

Figure 8: Display the bar chart

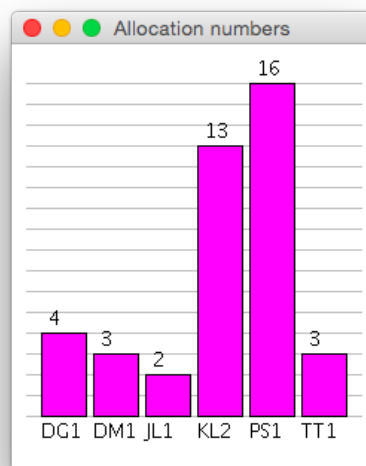
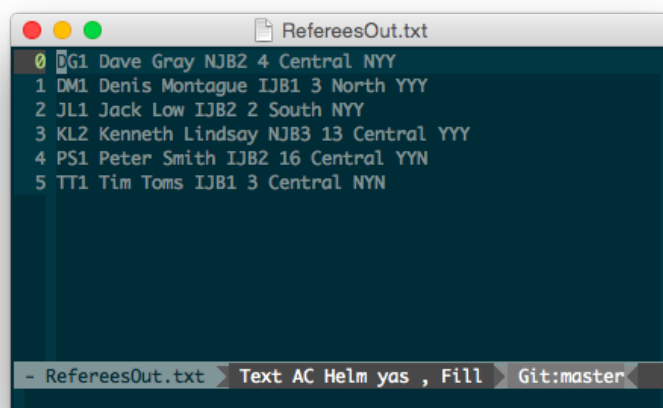
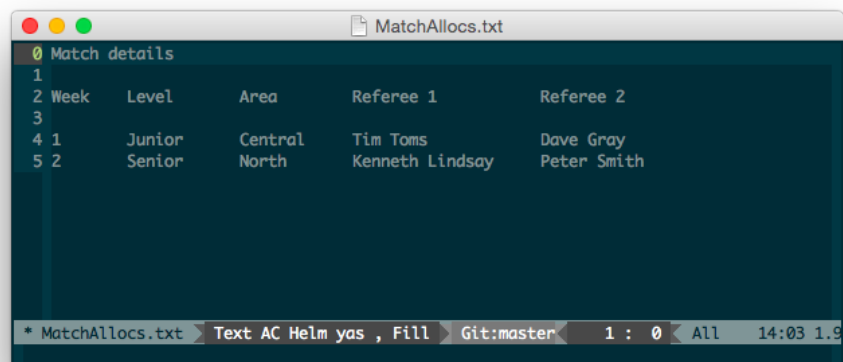


Figure 9: Display the contents of RefereesOut.txt



```
0 G1 Dave Gray NJB2 4 Central NYY
1 DM1 Denis Montague IJB1 3 North YYY
2 JL1 Jack Low IJB2 2 South NYY
3 KL2 Kenneth Lindsay NJB3 13 Central YYY
4 PS1 Peter Smith IJB2 16 Central YYN
5 TT1 Tim Toms IJB1 3 Central NYN
```

Figure 10: Display the contents of MatchAllocs.txt



```
0 Match details
1
2 Week    Level    Area      Referee 1    Referee 2
3
4 1      Junior   Central   Tim Toms     Dave Gray
5 2      Senior   North     Kenneth Lindsay Peter Smith
```