# Intro

The process for eliciting user requirements is an iterative one that used multiple methods. The methods chosen were a questionnaire, answered by selected participants, and interviews. In the interviews participants were asked open-ended questions at the start and were then shown a scenario in order to give them a clearer idea of how the system could potentially work and therefore make it easier for them to critique and suggest more ideas.

# Understanding the Domain

The app centres around football predictions, more precisely the final score with the potential for other variables/statistics to be predicted depending on user preferences. The most likely use case of the app is a football fan using it as an assisting tool for placing bets, using the information gained from the app to inform their decision.

# Participants

As this app is most likely to be used as a betting assist, the age range began at 18. The users could potentially be anywhere from 18-66+ but it was assumed that younger people with constant income (employed/not retired) will be using the app the most and so the age range was 18-44. Additionally, more men tend to watch football than women so there were more men selected as participants, although women were still included. There was a 70:30 ratio of men to women. (<https://www.statista.com/statistics/1093874/share-of-british-adults-that-watch-men-s-premier-league-football-by-frequency-and-gender/>)

A prior requirement for the participants was that they must be football fans, also at least 50% of them must have used a betting app before. The participants chosen for interviews were different from those who answered the questionnaire, in order to get a broader view from different people. A participant table is shown below:

|  |  |  |  |
| --- | --- | --- | --- |
| **ID** | **Gender** | **Age** | **Prior Betting App Use** |
| **Questionnaire Participants** | | | |
| 1 | Male | 18 | No |
| 2 | Male | 21 | Yes |
| 3 | Female | 24 | Yes |
| 4 | Male | 19 | Yes |
| 5 | Female | 27 | No |
| 6 | Male | 34 | Yes |
| 7 | Male | 31 | Yes |
| 8 | Male | 29 | Yes |
| 9 | Female | 30 | No |
| 10 | Male | 41 | Yes |
| **Interviews** | | | |
| 11 | Male | 23 | Yes |
| 12 | Male | 24 | No |
| 13 | Female | 20 | Yes |
| 14 | Male | 34 | Yes |
| 15 | Male | 42 | Yes |

# Questionnaire

Before answering, the participants were briefed on the application and its goal. Aesthetics of the app were not considered at this stage as a questionnaire is more valuable for eliciting user requirements than giving opinions on how the app should look.

The questionnaire was answered by 10 participants. It consisted of 10 questions, with a mix of open ended and closed (yes/no) questions. The questionnaire focuses on narrowing user requirements down for the base functionality of the application.

The questionnaire consisted of the following questions:

1) Is predicting the match result enough feedback from the app?

2) If not, what other variables would you like returned? (e.g corners, goals etc.)

3) Is a premier-league based app sufficient, would you like more leagues?

4) How would you define a successful app?

5) Should player statistics/predictions be included?

6) What is the single most important thing that you want to see returned from the app?

7) What platform would you like this to be available on. Web application, mobile application etc.?

8) Would an account be useful?

9) If so, what features would you like associated with your account? (Predictions for your favourite team, view history etc.)

10) Is there anything that hasn’t been mentioned that you would like to include or talk about in relation to the model?

# Questionnaire Results

We looked at the questionnaire results in two sections, responses to the closed questions vs responses to the open-ended questions.

Looking at the closed question results:

|  |  |
| --- | --- |
| Question | % answered ‘Yes’ |
| 1 | 60% |
| 3 | 20% |
| 5 | 30% |
| 8 | 40% |

The majority of responses said match results would be enough information, just premier league based predictions are sufficient, player statistics are not needed and an account would not be useful. Of course, there were participants who were in the minority and their answers were taken into consideration to be talked about during the interviews.

In the open-closed questions, the feedback was mixed as could be expected. From the 40% participants that wanted to see more than a match result, they wanted to see a variety of predicted stats from total corners to total goals scored. For how they would define a successful app, the general consensus was that an app that predicted the correct result more often than not would be successful (a success rate of > 50%). Although most said they didn’t view an account as necessary, those that did said that features such as favourite teams would be useful.

In general, there were lots of suggestions on features made from the open-ended questions that would have been useful to get the opinion of the whole participant group instead of the single participant that made the suggestion. Therefore, it was concluded that interviews would be conducted, with a new set of participants, that centred around those suggested features along with scenarios to make it easier to visualise.

# Interviews

As the interviews used a new set of participants, they were also briefed on the application and its main functionality and shown a photo that displayed how a basic menu/gui could look. (shown below)

Team 1

Team 2

dropdown menu

**\*PREDICTED SCORE\***

+

Ability to add more variables/stats

Team Crest

Team Crest

**Submit**

The interview questions were open-ended and made to incorporate some of the features and topics suggested by questionnaire participants. The interviews began with the same starting question(s):

**How does this basic concept look to you, compared with what you may have had in mind? What do you consider to be the most important feature?**

Following the initial questions, other questions were asked to lead the participant to different areas of the functionality and requirements:

1. Aside from the match result, what 3 other statistics would you consider to be the most important?
2. Looking at the basic design, what things could make the application easier to use for you?

Moving onto the ethnography element, participants were shown a scenario that they could make suggestions on or use to help them think of new critiques or features.

The scenario shown:

|  |  |
| --- | --- |
| Initial Assumption | User has opened the application and has loaded up the menu page. |
| Normal | User will select two teams to form predictions around from dropdown menus. User will then select variable(s) to be predicted.  User will press the submit button |
| What can go wrong | User only selects one team. User should be prompted to select a second team  User selects the same team twice. User should be prompted to select two different teams.  User presses the submit button without selecting 2 teams or/and a variable to be predicted. User should be prompted to fill in all required fields. |
| Other Activities |  |
| System State on Completion | A match prediction and any other selected variables between the two teams are returned on the screen for the user. |

At the end of the interviews participants were asked if they had anything else they wished to add that had not been covered or talked about already so that we could be certain every suggestion was shared with us.

# Interviews - Analysis

In general, the participants liked the idea of the application and the simple concept was appreciated by most, even if the design concept was very basic it was considered as something that would be easy to use. The three variables that appeared most in the participants top 3 statistics to include were corners, yellow cards and goals which lined up nicely with responses from the questionnaire to give us 3 additional statistics that we were confident would be valued by most users. Other features were also suggested such as a confidence rating in the prediction and a ‘clear’ button to clear all selected teams and variables (for ease of use).

# Elicitation Analysis + Result

Upon completion of the elicitation process, with the data we collected we were able to determine which features would be most useful to potential users and produce a list of user requirements. These user requirements were ordered into priority and subject to a feasibility study. This helped us to understand which requirements were absolutely necessary to the success of the application and how to go about implementing them in the given timeframe.