# Criteria A

**Scenario: [250]**

The client is a football academy coach for F17 Singapore who coaches the under 18 team, Mr. Jahsh Ruzzman bin Mohammed Imran. Currently the head coach of the team, he selects the team every week for the next game week, he also scouts the under 16s to find new players to strengthen the team.

According to the client, the system of selection, scouting and management for each team is based on memory and a whiteboard where he keeps tracks of positioning and strengths for each match (appendix 1.2). He maintains a list of preferred positions for each player which he takes at the start of each season. He states that his process is based on how well he thinks a player has played, and understands the issue with his system as he is unable to keep track of eleven players on a pitch at once and analyse their playstyle. Many times there are “movements which can open space elsewhere which I may not see” (Jahsh Ruzzman). There is no existing system which enables him to pick the best team as it is a 23 man squad on rotation thus has to make informed decisions to the best of his ability. He states that he also receives input from other coaches who are present to get a more informed perspective of each player. Therefore it can be said that the current system is subjective, memory reliant and relies on the coach’s ability to track players and understand the game.

**Proposed product: [250] - Need to reduce word count**

As an ex-player, this is not ideal as selection is subjective and good performances may be missed. This justifies the need for a solution as the current system not only isn’t fair but also prevents the best team being played.

To solve the identified problems from the head coach, my proposed solution is a basic, user-friendly CLI system which will allow the coach to make an informed decision. This system will use quantitative data related to the player’s preferred position and provide a ranking for each player based on chosen statistics and output as groups with each position. For transparency, the statistics can be accessed individually. My client wants quick and easy access, therefore a classic Command Line Interface is ideal (appendix 1.2).

There is no database of statistics for players in the academy, selections are made from memory. The new system would be able to not only qualitatively, but provide a quantitative (objective) footing in the decision making. The final choice is still made by the coach. This is also better for the players as the coach can refer to the ranking system potentially giving different players opportunity. This will be calculated using sorting and searching algorithms along with statistical analysis. The system will benefit all parties thus justifying the need for a solution.

The new solution will be programmed using Eclipse IDE, Java JDK11. Eclipse is a well rounded IDE and also open source, incurring no extra cost for a product. A binomial distribution will be used for statistical analysis.

**Success Criteria:**

1. The client must be able to navigate the CLI with ease: within 5 buttons presses the required function must be found
2. The client must be able to search for specific players and obtain statistics and ranking
3. The client must be able to edit and delete players if necessary
4. The system must allow the head coach some influence on the ranking
5. The system should be able to validate and verify data entry (incorrect format/data type) witch appropriate error catching
6. The data must be able to export as a CSV file for the whole team
7. The system must only allow for statistics to be edited, processed data can not be accessed or manipulated
8. The system should be able to save data preventing a reset with each use of the program