# Chance-It Requirements Specifications

### Functional Requirements

*In lieu of specific Use Case Scenarios, a User Manual is attached which describes a user’s overall interaction with the application.*

* All menu screens outside of an active game must have the ability to backtrack to the previous menu by entering **‘P’**, and exit the application by entering **‘E’**.
* All menu screens where the only option is to return to the previous screen should do so when the user presses **‘enter’** (no command input required).
* The application must respond elegantly to improper user input in a cooperative fashion, attempting within reason to derive the user’s intended command.
* The application command system must be case-insensitive.
* The application must allow a user to properly play and complete a game of Chance-It using the rules stated in the User Manual.
* The application must track the top ten highest human player scores in a text file.
* The application must allow the user to play again or return to main menu when a game is completed.

### Non-Functional Requirements

*Development*

* Code must be commented appropriately to allow programmers to implement modules effectively, and understand internal design decisions.
* The application should never crash except under a malicious user.

*Performance*

* The application must respond to server requests within 0.75 seconds during network play.
* The application must respond to user input within 0.5 seconds during menu navigation and local play.

*Environment*

* The application must communicate with the network server using TCP.
* The application must be written in ‘C’.
* The application must run on any Linux environment with a GCC compiler.
* The application must launch from Terminal.
* The application must run on a Command Line Interface.