Ten traditional demands

The program shall be runnable

Pre-Condition
- Access to an Android-device with the application installed
  - Start the application.

Basic Path
The application starts and shows the menu.

Exception

Code is not executable
Program would not run

The program shall follow the real chess rules.

Pre-Condition
- Be in the GameView

Basic Path
Press on a piece to select it and then press on another to try and move there.

Exception
Select a piece when it is not your turn
Nothing will happen, since it is the opponent's turn

Select an empty position or opponents piece
Nothing, will happen, since you only can move your own pieces

Select one of your own pieces that can not move...
The piece will be selected, but will not be able to go anywhere
...and press on an position
Piece will be deselected and nothing happens

Select one of your movable pieces and press on a position it can not go to according to rules
Piece will be deselected and nothing happens

Select one of your movable pieces while chessed and move to a position that is not preventing you from being chessed
Piece will be deselected and nothing happens

There shall be a graphic representation of the model.

Pre-Condition
- From overview
  - Start a new game, or enter an existing one

Basic path
The game will open a new screen with a graphical representation of the game.
Exception path
There is no exception path.

Users shall be able to play against each other.

Precondition

- From overview
  - Click on the new game button

Basic Path

The game will search for an opponent and when an opponent is found, they will be able to play against each other

Exception Path

There is a server problem
The program will show a message to alert the user about server problem. The user will be able to try to find an opponent again by clicking on the new game button.

All components that looks like buttons shall be clickable.

Precondition

- In any view that has components that looks like button(s)
  - Click on the button

Basic Path

The button is clickable and will perform the action that it is supposed to perform

Exception Path

The component is not a button
It is not clickable, so nothing will happen.

The user has no internet connection
If a user does not have any internet connection when clicking on the button, it will be clickable, but may not perform the action that the user expects if the button usually perform an action that requires internet connection.

It shall be able to play multiple games at once.

Precondition

- In Overview
  - Make sure you already at least one game active
  - Click on New Game button

Basic Path

The program will now try to find an opponent to play with

Exception Path

There are only two registered users
Because we have limited number of games you can play against the same opponent to one, you would not be able to find an opponent. The game will continue searching for a player until a third user register and search for an opponent.

All critical data shall be stored in the database instead of the phone.

Precondition

- From login-screen
    - Register account; fill in username, password and e-mail
    - Click on register button
- In-Game
    - Select a piece
    - Move to a possible position
- In Settings
    - Toggle on/off the help visuals
    - Change the sound settings
    - Change the avatar

Basic Path

The critical data is sent to be stored in the database

Exception Path

There is no. The program will always try to save the critical data on the database. If it fails because of, for example no internet connection, it will not be stored until got the internet connection back.

There shall be statistics about the user visible for him/her

Precondition

- From overview
  - Click on the stats icon
- If went from stats activity to another activity
  - Click on the back button

Basic Path

The user has internet connection
User will successfully receive statistic about him-/herself

Exception Path

The user do not have internet connection
The program will show a message to alert the user about network problem. Eventually if the user has seen statistics before, the program will show the latest statistics that is saved locally.

Passwords shall be encrypted before they are saved

Precondition
- From login-screen
  - Register account; fill in username, password and e-mail
  - Click on register button

Basic Path
The password will successfully be encrypted on the locally and sent to database and saved.

Exception Path
Because the encrypting part is made automatically when registering an account, there is no way the password can be saved without encryption.

The user shall be able to see ongoing games

Precondition

- From login-screen
  - Login with username and password. If not registered:
    - Register account and login with username and password
  - Click on login button
- In an ongoing game
  - Click on the back button
- In Stats
  - Click on the back button
- In Settings
  - Click on the back button

Basic Path

The user has internet connection and at least one active game
The user is able to see ongoing game(s)

Exception Path

The user do not have internet connection
The program will show a message to alert the user about network problem. Eventually if the user has seen the ongoing games before, the program will show the latest state of the game(s) that is saved locally.

There is no active game
There will not be a list of ongoing games because there is not any. There will be a text that suggest the player to search for a new game.