# Systems Requirements

#### REQUIREMENTS OVERVIEW

The following sections detail the system requirements we devised to ensure the website we develop meets the specifications published in the project description. The requirements are grouped by subsystem.

#### "HOME-SCREEN" REQUIREMENTS

Requirement Title:	Home-screen
Sequence No:	1
Short description:	Displays main menu
Description:	The Home screen will have navigable buttons namely Play Game and Settings
Pre-Conditions:	The user will have navigated to the Home screen after opening the app and going through the loading screen/splash screen
Post Conditions:	Users can navigate to play the game or change settings according to their need.
Other attributes:	There will be an animated background

## "SETTINGS" REQUIREMENTS

Requirement Title:	Settings
Sequence No:	1
Short description:	Gives two lists of settings- Game Settings and How to

	Play
Description:	A floating action button on the home screen will open a drop down menu that will have options namely Game Settings and How to Play
Pre-Conditions:	The user will have opened the drop down menu from the located at the bottom right hand corner of the Home-Screen
Post Conditions:	Users can navigate to change game settings and how to play the game
Other attributes:	The settings menu is animated and superimposes the home screen. It can be exited by tapping anywhere on the screen outside the system menu.
Requirement Title:	Settings
Sequence No:	2
Short description:	It is the Game Settings part of the settings.
Description:	While at the home screen user can select the settings icon and be taken the settings menu where they will be provided with option to adjust game settings as follows  Difficulty: Easy, Intermediate, Hard  # of Sticks: 5, 6 and 7
	Who moves first: User, Computer

Pre-Conditions:	The user will have opened the drop down settings menu
	located at the bottom right hand corner of the Home-Screen
	and clicked on the game setting button

Post Conditions:	User can change the settings or exit the screen to homescreen
Other attributes:	It is a new frame with all the above options in a radio box
Requirement Title:	Settings Settings
Sequence No:	3
Short description:	It is the How to Play part of the settings.
Description:	The How to Play tells the user how to play the game. A brief description of the game- "Nim is a mathematical game of strategy in which two players take turns removing objects from distinct heaps. On each turn, a player must remove at least one object, and may remove any number of objects provided they all come from the same heap. The goal of the game is to be the player to remove the last object."
Pre-Conditions:	The user will have opened the drop down settings menu located at the bottom right hand corner of the Home-Screen and clicked on the How to Play button
Post Conditions:	User can look at the information or exit the screen to homescreen

Other attributes:	It is just a new frame with text information and a horizontal
	scroll box

## "GAME PLAY" REQUIREMENTS

Requirement Title:	Game play
Sequence No:	1
Short description:	Game play mechanics
Description:	Once a game has been initiated the user will be taken to the game screen where depending on selection the computer or user will select sticks from the row. During the users turn he/she will be allowed to select the desired amount of sticks from a single row. Once a stick is selected in one row if a stick from another row is selected the stick of the previous row will be deselected.
Pre-Conditions:	The play button must be pressed.
Post Conditions:	Turn will change from user to computer or vice versa.

## "RESULTS" REQUIREMENTS

Requirement	Results
Title:	
Sequence No:	5
Short description:	Results Screen
Description:	At the end of a game a results screen will pop up that will display the ending statistics of the game, and give an option to exit and the highscore.
Pre-Conditions:	User will have to have finished a full length game
Post Conditions:	User will be taken back to the Home Screen
Other attributes:	N/A