

# QA MANUAL

## Game Components

- Main menu and menu functions (play button, rate us, how to play)
- Art (character model, texture, terrain/world, crowd, objects etc.)
- Animation (the like and feel of the movement, realism, frame rate etc.)
- Sound and the Sound effect (in conjunction with the facial animation e.g., lip-sync, and the animation sequence)
- Music
- Camera (cinematic view, zoom in and out, replay)
- Game flow and logic
- World/level/scene
- The player attributes
- The action attributes
- The condition to advance to the next level (what are the rules?)
- The use of environmental objects
- The event/object triggers
- The scoring
- Progressive level difficulty
- The AI logic (for both offensive and defensive play; player movement and positioning)
- Statistics (pre-game and in-game like player statistics and high score)
- Title screens
- NIS (Non-interactive sequence)
- SFX (special effects)
- The use of multi-button actions (button mashing)
- The ease of use of the button functions
- Legal text
- The game options
- The tutorials

# Game Testing Types

## Combinatorial Testing

Test all the possible combinations that can be performed in the game. E.g., A character can go forward, back, left and right.

## Functionality Testing

The core features of the game should be working. If a character is supposed to jump, it shall jump.

## Compatibility Testing

How compatible is your game on different specs, platforms and devices? Checking game on as many devices as you can.

## Regression Testing

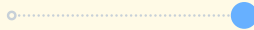
For example, game has 3 levels and a new level is added or any of the current levels is changed, then you test all the levels again to make sure the existing levels aren't affected by the change.

## Ad Hoc Testing

General testing, testing any level, testing any combination/ settings without any plan.

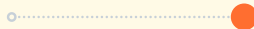
# Game Testing Types

## Load Testing



Checking game for weaker specs, doing multiple things at a time. In case game crashes, it shall do in a graceful way. A message like, "You were not supposed to put this much load"

## Play Testing



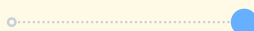
Playing the game just to build confidence, making sure game is fun to play.

## Soak Testing



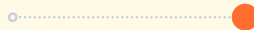
As games are different than websites and a game can paused for half an hour or an hour, and then resumed again. The game shall be able to work without any hiccups. Leaving the game open for hours.

## Alpha Testing



Testing the game by testers.

## Beta Testing



Testing the game at client's end.

# Game Testing Process

## TEST PLANNING

### **Test Plan**

### **Test Strategy**

- How testing shall be carried out during the project life cycle.

### **Quality Plan**

- Verifying and validating the final product.

### **Sprint Plan**

- How many builds of a product will be tested during a sprint?

## TEST DESIGN

### **Test cases**

### **Test data**

### **Test Environments**

## EXECUTION AND REPORTING

### **Defect Report**

# Tips & Tricks

1.

**Perform game testing on entire screen, not a part of it**

2.

**Testing the game against the rules specified when developing the game**

3.

**Test the loading of game from another device such as different supported systems and verifying if the correct messages are being displayed on the screen**

4.

**Verify that game shows appropriate message to the user at all the points**

5.

**Testing if the game leads to memory overload in case game is left turn on for several hours/days.**

6.

**Do remember to carry out the test for clipping such as two or more polygon objects overlapping each other.**

- **Test for inappropriate collision**
- **Closely monitor the character's behavior on moving through the available objects and all other things**