**Project Plan: Intelligent Tic-Tac-Toe**

written by:Phaneendra Reddy

**1 Introduction**

This document lays out a project plan for the development of Tic Tac Toe game.The team consists of an SE student at the Indian Institute of Information Technology, Chittoor. This document is mainly to draw attention of Sponsors and developers.

**2 Overview**  
Many apps have been developed which are challenging,interesting and addictable. But there are only few games where Artificial Intelligence does holds. So I am making an intelligent Tic Tac Toe game where the human brain can never win against Computer brain so that an user get addicts to it and tries to think of for a better solution.  
**2.1 Customers**   
  
All game lovers are the customers of this product. Those who wants challenging will be the primary users.

**2.2  Functionality**

The functional requirements of this application are

1. **Displaying a 3x3 grid:** This grid is required to play the Tic-Tac-Toe game. It is on this grid that the two players take turns marking the spaces as X and O.
2. **Alternating between X and O Players:** This game requires two players, one playing as X and one playing as O (with X usually starting). To ensure that a player doesn’t play twice, switching between them is required.
3. **Determining the Winner of the Game:** Once a player wins the game, the message should be displayed which player won. If no one won the game, then it is a draw.
4. **Displaying Score Details:** There must be 3 columns for maintaining the scores. One for each player and one for the games which were a draw.
5. **Providing Option to Play Again:** The game must provide an option to either play again or to exit the game.

**2.3 Platform**  
  
This model is built on Web based Application and apps are made on Android and IOS.

**2.4 Development Responsibility**

The overall Project responsibility and everything related to designing,graphics interface, application programming interfaces is developed by the team member.  
**3 Goals and Scope**

The CodeBots would be implementing the following goals before the final release,

1. **Displaying a 3x3 grid:** This grid is required to play the Tic-Tac-Toe game. It is on this grid that the two players take turns marking the spaces as X and O.
2. **Alternating between X and O Players:** This game requires two players, one playing as X and one playing as O (with X usually starting). To ensure that a player doesn’t play twice, switching between them is required.
3. **Determining the Winner of the Game:** Once a player wins the game, the message should be displayed which player won. If no one won the game, then it is a draw.
4. **Displaying Score Details:** There must be 3 columns for maintaining the scores. One for each player and one for the games which were a draw.
5. **Providing Option to Play Again:** The game must provide an option to either play again or to exit the game.
6. **Extra Features**: Unlimited Tic Tac Toe feature,Modes of game will be developed.

**4 Deliverables**  
The team member will deliver the following to the sponsor

Project Specification

Product Design

Test Plan

Deployment Document

Source Code

**5 Risk Management**

**5.1 Risk Identification**  
  
The possible risks involved in this project are:

1) API’s

2) Graphical Interfaces.

3)Data usage.

.

**5.2 Risk Mitigation**

1. Data Usage would be more as more API’s and for storing of scores

**6 Scheduling and Estimates**

|  |  |  |  |
| --- | --- | --- | --- |
| **Milestone** | **Description** | **Release Date** | **Release Iteration** |
| M1 | Product Document | September 20, 2015 | R1 |
| M2 | Application Design | October 1, 2015 | R1 |
| M3 | Graphical Interface | October 12, 2015 | R1 |
| M4 | API’s interface and | November 10, 2015 | R2 |
| M5 | Release of APP on given platforms. | November 30, 2015 | R2 |
| M6 | Final Release of the product after testing it by the sponsors. | December 10,2015 |  |

**7. Technical Process**

The technology would be using in this project are:

Front-end:- HTML, CSS, JavaScript,AJAX,Graphics.

Back-end:-MySQL(Databases),Java, PHP or Django Framework for integrating views and design.

For Development of App:

Android- Java .

IOS- Objective C.