**Chapter 1**

**INTRODUCTION**

Here we specify the overall description of the requirements for our project “Mystery Doors”. This report mainly includes the drawbacks of the previously existing system, Motivation, Problem definition of the project and Scope of the project etc. The Software Requirements Specifications (SRS) document defines the requirements for the system and the methods to be used to ensure that each requirement is satisfied for the project. This document encapsulates all the characteristics and features expected of the system including functionality, user interfaces, performance and attributes. Any constraints to the implementation of the system are also discussed here.

**Existing systems and its drawbacks**

In the past video game industries were booming exponentially. But with the success rate of personal computers and mobile phones the online gaming websites and applications have become a hit. Earlier games were just for entertainment, to pass the time or to just relax the mind. But with the world being so competitive the cliché of entertainment in games has turned to learning. People tend to learn through games. People tend to learn in every moment. We believe in learning throughout the life. There are so many gaming applications which provide entertainment. But there are very few applications which provide knowledge through entertainment. This application is one among them.

**1.1 Motivation**

The motivation for the “Mystery Doors” Windows project has two considerations. First one is the importance of logical reasoning and practical analysis. Second one is to learn building the applications for Windows operating system which will be the future extensive use in many mobile phones. Today, games have become a vital part in life. There is a huge competition between many mobile phone Operating Systems. To overcome this competition efficient and useful applications are necessary. Keeping this in mind we have developed this application for our windows OS users.

**1.2 Problem definition**

To design and implement a gaming application for Windows based mobile phones which tests the user intelligence at its best.

**1.3 Scope of the project**

* This mobile application is categorized under Games, where the main objective is entertainment.
* Entertainment is the main criteria of this application.
* The main features of this application are- Entertainment, increasing the reasoning skills and it is suitable for all age groups.
* The puzzle game instances that various players solve must be matched with the player ability.
* The difficulty level must be maintained according to the player’s ability. We call this combined challenge as the “puzzle difficulty balance”.

**Chapter 2**

**SYSTEM ANALYSIS**

It deals with the analyzing of the entire system i.e. the different entities and the interaction between those entities and also the different functionalities of the system. It consists of performance analysis, It also consists of the specification of different types of requirements like software requirements, communication requirements, database requirements etc.

**2.1 System Model**

The software system has been designed into two levels. At the first level the focus is on deciding which modules are needed for the system, the specification of these modules and how the modules should be interconnected. This is called as system design or top level design. In the second level, the internal design of the modules or how the specifications of the module can be satisfied is decided. This design level is often called detailed design or logic design.

**2.2 Functional Requirements**

* At the start of the application, the main menu page shall be displayed.
* The main menu shall consist of 2 buttons, PLAY and EXIT.
* At the click of PLAY button, the user shall be given an option to enable or disable the sound of the application.
* If the user enables sound then background audio shall be played using background audio player agent.
* After enabling/disabling of the sound the application shall be navigated to the next page.
* The next page of the application shall introduce the story to the user.
* In this application .gif shall be used to enable the animation and the motion of the images.
* During gameplay different set and type of questions shall be displayed on screen and answers shall be validated before proceeding to next step.
* Different set and type of questions and all the solutions shall be stored in an isolated file storage medium i.e. mobile’s flash memory.
* At a different level of game suitable type of question must be fetched from file and displayed on screen.

**2.3 External Interface Requirements**

**2.3.1 Hardware Requirements**

Windows mobile phone

128Mb RAM

Minimum storage space on hard disk is 15Mb.

**2.3.2 Software Requirements**

Visual Studio Express for Windows Phone.

Windows phone emulator.

**2.3.3 Communication Requirements**

**2.4 User Interface Requirements**

• Home Screen: The first screen to be displayed which allows user to enter the user to start the game.

• GUI: When the user chooses some other option, then the information pertaining to that choice will be displayed on to the screen.

• Notifications: When the user loses, then the necessary message like “game over” will be displayed.

**2.5 Database Requirements**

**2.6 Performance Requirements**

Performance requirements coincide with the Windows platform limitations.

* Memory- Our app requires maximum of 15 Mb memory.
* Response time- This app’s response time is 0.5s.
* Speed- Depends on the mobile’s main memory.
* Portability- Meets out all the requirements of the customer.
* Performance- The performance is better if the user downloads the app properly.

**2.7 Software Quality Attributes**

**2.7.1 Security:**

**2.7.2 Reliability**

• Availability: 99.99 %.

• Mean Time To Repair (MTTR): 1 hour.

• Accuracy: 100%.