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| Mobile Hide & Seek Project |
| Features and Technology Agreement |
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## Revision History

|  |  |  |  |
| --- | --- | --- | --- |
| Version | Date modified | Author | Description |
| 1.0Alpha | 12/07/2012 | Tran Dao Vuong Vu | Initial document |
| 1.0 | 12/07/2012 | Tran Dao Vuong Vu | Finalize information |

## Executive Summary

The purpose of this document is to provide a summarize report on the features and technology being implemented and used in this project. This report covers a brief business requirement and actual solutions.

This document also act as an agreement between client and development team on what features and technology that being employed.

Any solution proposes here in this document mean to be completed and deliver to client at the end of project. Any changes make to this document need a formal process and propose to client for acceptance.

## Business Requirements

After some discussion with client and local representative about the developing system, we summarize here key requirements of the system.

### Functional Requirement

#### Android Application

|  |  |
| --- | --- |
| **ID** | **Description** |
| FA1 | Players can register to become member on the device |
| FA2 | Players can login on the device to use member features |
| FA3 | Players don’t need to be members to view public game list or game details |
| FA4 | Device show a list of games that available |
| FA5 | Device show details of a specific game upon user selection |
| FA6 | Member can join a specific game if he or she meet the game requirement |
| FA7 | Device can identify its location using GPS technology |
| FA8 | Device can communicate with the logic server to send and receive gamesand players related information |
| FA9 | Device can display game hint based on their type (message, image, sound) |
| FA10 | Device sent hints (message, image, sound) to the server |

#### Web Service Application

|  |  |
| --- | --- |
| **ID** | **Description** |
| FS1 | Authenticate and authorize players |
| FS2 | Communicate with the device to receive and send games and players information |
| FS3 | Allow user send hints (message, image, sound) to the server |
| FS4 | Send hints (message, image, sound) to player device |
| FS5 | Save games and players information to database |
| FS6 | Calculate player score based on time to find hider location |
| FS7 | Tracking and logging activities |

#### Database

|  |  |
| --- | --- |
| **ID** | **Description** |
| FD1 | Using a DBMS |
| FD2 | Store game information |
| FD3 | Store player information |
| FD4 | Store game play activities |
| FD5 | Store logging static information to support decision making (number of access, number of connections, most accessed feature) |

### Non-functional Requirement

#### Android Application

|  |  |
| --- | --- |
| **ID** | **Description** |
| NA1 | Simple GUI |
| NA2 | Ease to use (Big button for touch, clear text to read, helper) |
| NA3 | Run on GPS-based android smartphone version 2.3.3 and later |
| NA4 | Data transfer format xml, json, binary |
| NA5 | Sound format is lossy mp3 |
| NA6 | Image format is compressed jpeg |
| NA7 | Using Java or C in development |
| NA8 | Navigating system accuracy is in an average level |

#### Web Service Application

|  |  |
| --- | --- |
| **ID** | **Description** |
| NS1 | Simple security feature (basic authentication) |
| NS2 | Run on Linux server |
| NS3 | Using Java or other scripting language in development |
| NS4 | Refer applying framework |

## Actual Solutions

### Application Android

|  |  |  |
| --- | --- | --- |
| **ID** | **Description** | **Req.** |
| SA1 | Login and register function (GUI and request for web service) | FA1  FA2 |
| SA2 | Public section to show game list, game details | FA3  FA4  FA5 |
| SA3 | Processing received information from web service | FA8 |
| SA4 | Sending information to web service | FA8 |
| SA5 | Join game function (request for join send to web service) | FA6 |
| SA6 | Record device location | FA7 |
| SA7 | Record image on device (take picture or select local photos) | FA10 |
| SA8 | Record sound on device | FA10 |
| SA9 | Tracking location change | FA7 |
| SA10 | Design application GUI | NA1  NA2 |

### Web Service Application

|  |  |  |
| --- | --- | --- |
| **ID** | **Description** | **Req.** |
| SS1 | Using Java in developing | NS3 |
| SS2 | Using Jersey framework for web service logic and handle | NS4 |
| SS3 | Using Spring framework for application setting and control | NS4 |
| SS4 | Using Hibernate framework for communicate with database | NS4 |
| SS5 | Basic authentication implementation | FS1 |
| SS6 | Player login and register system | FS1 |
| SS7 | Upload function | FS3  FS4 |
| SS8 | Location function | FS6 |
| SS9 | Game play function | FS2  FS5  FS6 |
| SS10 | Tracking function | FS7  FS5  FS3 |
| SS11 | Logging function | FS7 |

### Database

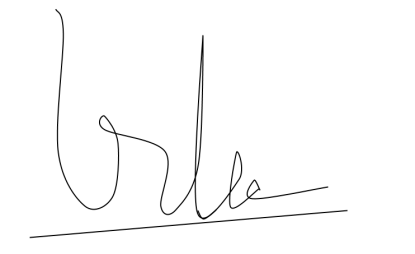
|  |  |  |
| --- | --- | --- |
| **ID** | **Description** | **Req.** |
| SD1 | Using MySQL as DBMS | FD1 |
| SD2 | Design database for games and players information | FD2  FD3 |
| SD3 | Design database tracking and logging activities | FD4  FD5 |

## Signature

By signing off here, you accept this document as a legitimate agreement between two parties.

Development Team Leader Signature Date

27nd December, 2012



Tran Dao Vuong Vu

Client Signature Date

28nd December, 2012

*[Insert your signature here]*

Indra Wijaya