

AR Map 2Go!

Project Plan

By

Mr. Parun Pichaiwong 522115043

Department of Software Engineering
College of Arts, Media and Technology
Chiang Mai University

Project Advisor

Mr. Jayakrit Hirisajja

Document History

Document Name	Version	Status	Date	Viewable	Reviewer	Responsible
Documents						
AR_Map_2Go!_Project_Plan_1.0	AR_Map_2Go!_proposal_1.0 Added <ul style="list-style-type: none"> Document Purpose Project Scope 	Initial version	11 July 2016	JH	PP	PP
AR_Map_2Go!_Project_Plan_1.1	AR_Map_2Go!_proposal_1.1 Edit <ul style="list-style-type: none"> Milestone Scheduling Project Constraints Deliverable Project Risk Methodology Software Development Tools Quality Planning 	Reviewed	16 July 2016	JH	PP	PP

***PP = Parun Pichaiwong**

***JH =Jayakrit Hirisajja**

Document Name	AR_Map_2Go!_Project_Plan_1.1.docx	Owner	PP	Page	2 / 27
Document Type	Project Management plan	Release Date	20 July 2016	Print Date	8 August 2016

Table of Contents

Chapter One Introduction	4
1.1. Project Overview	4
1.2. Acronyms and Definition	5
1.3. Work Product to be developed	8
Chapter Two Infrastructure	10
1.1. Hardware/Software Acquisition Plans	10
1.2. Management Procedure	11
1.3. Monitoring and Controlling Mechanisms	12
1.4. Change Management	16
Chapter Three Quality Planning	17
1.1. Quality Factors	17
1.2. Reviews/Responsibility	18
1.3. Testing	19
1.0.	19
Chapter Four Software Standard	20
4.1 Project Management (PM) process	20
4.2 Software Implementation (SI) process	22
Chapter Five Estimated of Tasks	24
5.1 Estimated Duration of Tasks	24
5.2 Estimated Effort and Cost	24
Chapter Six Risks	25
Chapter Seven Version Control	26
7.1 Naming Conversion	26
7.2 Project Repository	26
7.3 Configuration Item Table	26

Document Name	AR_Map_2Go!_Project_Plan_1.1.docx	Owner	PP	Page	3 / 27
Document Type	Project Management plan	Release Date	20 July 2016	Print Date	8 August 2016

Chapter One | Introduction

AR Map 2Go! is a mobile application on Android to provide a new kind of the location-based service (LBS) and navigation integrates with **AR (Augmented Reality)** Technology which is the most popular technology trends today. This application will help users to find out many nearby locations on the map picture easily by scanning the map picture or the location text title on the magazine. With virtual reality view, it tends to enhance the user experience with 3D-object which can interact in the real world to it more interesting than others. This project uses the concept of "Scan, Tab & Go!" to make the easy way to explore and find the nearby location on a map and display all related POI locations via interactive 3D-object to users via the mobile camera view.

1.1. Project Overview

The main objectives are a developing AR Map 2Go! application on android operating system integrate with AR (Augmented Reality) Technology in order to the information about the tourist destinations to the user. This designed system integrates the technologies of android operating system with AR technology to create the 3-dimension object on the map and present to the user. Such the system will scan and display the related POI locations via interactive 3D-object to users.

1.1.1. Purpose

The purpose of AR Map 2Go! the project is developing mobile and web application by implementing Augmented Reality technology with geo-tracking based application. This application allows users scan on the map picture or location text title to explore the Point of Interest (POI) locations and shows as the interactive real world object (3D) with virtual scenes technology. The administrator can manage the data and information on the server side via the web application to keep this application are newly and up-to-date. The development of this application will be done under the ISO 29110 software quality standard.

1.1.2. Scope

The scopes of this project plan and quality plan are:

- Develop an Android application using open source tools for the user.
- Develop a web application using open source tools for the administrator.

Document Name	AR_Map_2Go!_Project_Plan_1.1.docx	Owner	PP	Page	4 / 27
Document Type	Project Management plan	Release Date	20 July 2016	Print Date	8 August 2016

- Let the user scan on the map pictures via this application to find all related locations on the map.
- Let the user scan on the location text title via this application to get the information about the target destination.
- Let the administrator add more new locations by managing and providing the information into server database system.
- Let the administrator add more 3D object symbols by managing and providing a new 3D model files into server database system.
- Be able to seek for locations' information and location
- Develop an Android application with Augmented Reality by Vuforia SDK.
- Apply the knowledge about JAVA programming language, Database, Web application, OOP, Software Component base (MVC) and mobile device technology into this project.

1.2. Acronyms and Definition

Acronyms

AC	Activity diagram
SDD	Software design document
SPMP	Software project management plan
SRS	Software requirement specification
URS	User requirement specification
UC	Use case
UI	User interface
CSS	Cascading style sheets
CD	Class diagram
SD	Sequence diagram
STC	System test case
UTC	Unit test case
MDA	Method design Attribute
MDM	Method design method

Document Name	AR_Map_2Go!_Project_Plan_1.1.docx	Owner	PP	Page	5 / 27
Document Type	Project Management plan	Release Date	20 July 2016	Print Date	8 August 2016

Definition

IEEE

Institute for Electrical and Electronics Engineers. Biggest global interest group for engineers of different branches and computer scientists. [IEEE90]

Milestone

A significant event in the project, usually completion of the main deliverable. [IEEE90]

Plan

A documented series of tasks requires meeting an objective, typically including the associated schedule, budget, resources, organizational description and work breakdown structure. [IEEE90]

Project management

The application of knowledge, skills, tools, and techniques to project activities in order to meet or exceed stakeholder needs and expectations from a project. [IEEE90]

Project Plan

A formal, approved document used to guide both project execution and project control. The primary uses of the project plan are to document planning assumptions and the decision, to facilitate communication among stakeholders, and to document approved scope, cost, and schedule baseline. [IEEE90]

Risk

An uncertain event or condition that, if it occurs, has a positive or negative effect on the project's objectives. It is a function of the probability of occurrence of a given threat's occurrence. [IEEE90]

Risk management

The systematic application of management policies, procedures and practices to the tasks of identifying, analyzing, evaluating, treating and monitoring risk. [IEEE90]

Document Name	AR_Map_2Go!_Project_Plan_1.1.docx	Owner	PP	Page	6 / 27
Document Type	Project Management plan	Release Date	20 July 2016	Print Date	8 August 2016

System testing

Testing conducted on a complete and integrated system for evaluate the system's compliance with its specified requirements [IEEE90]

Traceability

The ability to trace the history, application or location of an item or activity, or work products or activities, by means of recorded identification. The establishment and maintenance of relationships between such items. Horizontal traceability describes the relationship between work products of the same type (e.g., Customer requirements). Vertical traceability describes the relationship between work products, which build or derived from each other (e.g. from customer requirements to qualification test cases). Bidirectional traceability allows to directly following relationships in both directions. [IEEE90]

Validation

Confirmation by examination and provision of objective evidence that the particular requirements for a specific intended use are fulfilled ("doing the right thing"). [IEEE90]

Verification

Confirmation at the end of the process by examination and provision of objective evidence that specified requirements to the process have been fulfilled ("doing things right"). [IEEE90]

UML Unified Modeling Languages

Standardized notation for modeling design descriptions, architectures or scenarios. Not depending on a specific method. Issued and maintained by the object Management Group (OMG). [IEEE90]

Unit test

A test of individual programs or modules in order to remove a design or programming errors. [IEEE90]

Document Name	AR_Map_2Go!_Project_Plan_1.1.docx	Owner	PP	Page	7 / 27
Document Type	Project Management plan	Release Date	20 July 2016	Print Date	8 August 2016

1.3. Work Product to be developed

1.1.1. Deliverables

No.	Deliverables/Release	Media	No. of Copies	Data
1.	The Proposal report Project Proposal version 1.1.1	Hard copy	1	06/07/2016
2.	The Progress report I <ul style="list-style-type: none"> - Project Management Plan version 1.1 - Software Requirement Specification version 1.0 - Software Design Document version 1.0 - Test Plan version 1.0 - Test record version 1.0b - Traceability record version 1.0 	Hard copy	3	10/08/2016
3.	The Progress report II <ul style="list-style-type: none"> - Project Management Plan version 2.0 - Software Requirement Specification version 2.2 - Software Design Document version 2.2 - Test Plan version 2.0 - Test Record version 2.0 - Traceability record version 2.0 	Hard copy	3	22/09/2016

Document Name	AR_Map_2Go!_Project_Plan_1.1.docx	Owner	PP	Page	8 / 27
Document Type	Project Management plan	Release Date	20 July 2016	Print Date	8 August 2016

Chapter Two | Infrastructure

1.1. Hardware/Software Acquisition Plans

1.1.1. Testing tools

- **Hardware**
 - Nexus 4 with Android operating system version 6.0.1
 - MacBook Pro with OS X version 10.11.6
- **Software**
 - Google Chrome version 35.0.1916.114
 - Android operating system version 5.1.1

1.1.2. Design tools

- Adobe Photoshop CS 6

1.1.3. Development tools

- Android Studio version 2.1
- Aptana Studio 3
- MySQL version 5.0.51

1.1.4. Configuration management tools

- GitHub

1.1.5. Document tools

- Microsoft Office 2016 for Mac
- Visual Paradigm
- GanttProject

1.1.6. Project Library

- Vuforia SDK Android 5.5.9

Document Name	AR_Map_2Go!_Project_Plan_1.1.docx	Owner	PP	Page	10 / 27
Document Type	Project Management plan	Release Date	20 July 2016	Print Date	8 August 2016

1.2. Management Procedure

1.1.1. Project Team Structure

No.	Participants	Roles	Responsibility
1.	Mr.Parun Pichaiwong	System Analysis, Designer, Programmer, Tester	<ul style="list-style-type: none">- Project Proposal- Software Requirement Specification in part of web application- Software Design Document in part of web application- Software coding in part of web application- Test Plan document in part of web application- Test Record document in part of web application- Traceability record document in part of web application

Document Name	AR_Map_2Go!_Project_Plan_1.1.docx	Owner	PP	Page	11 / 27
Document Type	Project Management plan	Release Date	20 July 2016	Print Date	8 August 2016

1.3. Monitoring and Controlling Mechanisms

1.1.1. Software Development Model

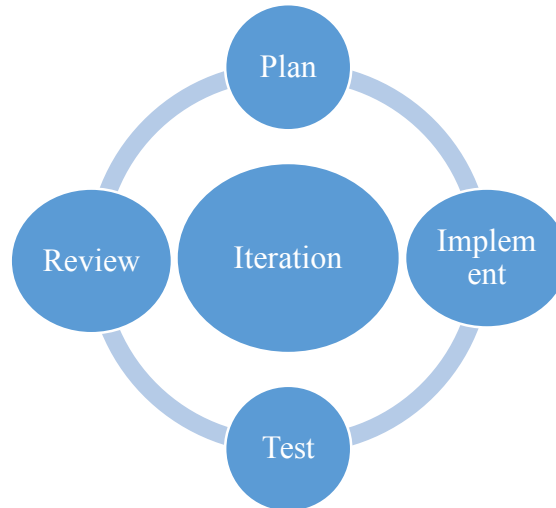


Figure 1.0: Iterative development model

Iterative development model is one of the software development models which evolves from waterfall model. By changing process flow from step to step into iterative step. When the process flows into iterative, the process will start from the first step then go to the next step till the last. After that, the process will back to the first step and start again. The iteration will be repeat until all processes planned are complete then out from the loop and go to next main phase.

Document plan phase: This phase is about document for planning and designs the overall system from requirement given by the user. Iterative all features: This phase is about separate system into many features and then iterative create all feature from the first feature till the final feature. For this phase, it will be divided into 4 phases. There are;

- **Plan:** Planning the method for creating and test each feature.
- **Implement:** Implementing and coding each feature.
- **Test:** Testing and fixing each feature.
- **Review:** Reviewing and maintaining each feature to meet the feature plan.

Document Name	AR_Map_2Go!_Project_Plan_1.1.docx	Owner	PP	Page	12 / 27
Document Type	Project Management plan	Release Date	20 July 2016	Print Date	8 August 2016

1.1.2. Status Reporting

No.	Progress Report	Software items	Date
1.	Progress I	<ul style="list-style-type: none">- Project Management Plan version 1.1- Software Requirement Specification version 1.0 (Feature 1,2,3,4)- Software Design Document version 1.0 (Feature 1,2,3,4)- Test Plan version 1.0 (Feature 1,2,3,4)- Test Record version 1.0 (Feature 1,2,3,4)- Traceability record version 1.0	10/082016

Document Name	AR_Map_2Go!_Project_Plan_1.1.docx	Owner	PP	Page	13 / 27
Document Type	Project Management plan	Release Date	20 July 2016	Print Date	8 August 2016

Features List

Progress Report #I

Feature #1: Registration and Authorization Management

Description: This features supports web-application management system for administrator.

Target: Users

- The user can register a new account.
- The user can delete an account.
- The user can login to the system.
- The user can logout from the system.
- The user can recover the password.
- The user can view the user profile.
- The user can update profile information.
- The user can change profile picture.

Feature #2: Web-Application and server Management

Description: This feature supports registration of users for using the system.

Target: Administrator

- The administrator can login into the web application system.
- The administrator can logout from the web application system.
- The Administrator can add the new location into the server.
- The Administrator can add the new 3D object symbol into the server.

Document Name	AR_Map_2Go!_Project_Plan_1.1.docx	Owner	PP	Page	14 / 27
Document Type	Project Management plan	Release Date	20 July 2016	Print Date	8 August 2016

Feature #3: Augmented Reality Management

Description: This features supports about Augmented Reality management to show the 3-dimension object on the map.

Target: Users

- The system can scan on the specified map picture.
- The system can scan on the specified text title.
- The system can show the 3D-object via camera view.

Progress Report #II

Feature #3: Augmented Reality Management (Continue)

Description: This features supports about Augmented Reality management to show the 3-dimension object on the map.

Target: Users

- The user can interact with 3D-object by click to get the action.

Feature #4: Map and Navigation Management

Description: This features supports map management system on mobile application.

Target Users

- Develop Map using Google Maps API.
- The user can click on each 3D-object to get route direction planning.
- The system can navigate route direction via Google Map application.
- The system can show nearby locations related with the specified target.

Document Name	AR_Map_2Go!_Project_Plan_1.1.docx	Owner	PP	Page	15 / 27
Document Type	Project Management plan	Release Date	20 July 2016	Print Date	8 August 2016

Feature #5: Notification Management

Description: This features supports map management system on mobile application.

Target: Users

- The system can send the notification to the user when the system has been updated.

1.4. Change Management

Change control procedure

1. Admit the change.
2. Analyze the reason for the change.
3. Send change form to project advisor.
 - 3.1. If accept: make a change in project from change request form.
 - 3.2. If reject: Continue in the project and find the way to solve a problem.
4. Analyze the result from changing and modify the document or system to match with change.

Document Name	AR_Map_2Go!_Project_Plan_1.1.docx	Owner	PP	Page	16 / 27
Document Type	Project Management plan	Release Date	20 July 2016	Print Date	8 August 2016

Chapter Three | Quality Planning

Quality Planning [V&V]

1.1. Quality Factors

According to McCall's factor model, Smart course management system in the cloud should meet these quality factor after complete;

1.1.1. Product operating factors

- **Correctness**
 - The software product should able to provide 100% correctness of data from user request.
 - The information in the system should be up to date at all time.
 - **Reliability**
 - The system should have a failure rate lower than 10% after deployed to the cloud server.
 - **Integrity**
 - The system should able to identify the authentication of every user.
2. The system should able to limit some features and pages from unauthorized user.

1.1.2. Product revision factors

- **Maintainability**
 - The software should have at least 20% of comment comparing with the whole Line of code to support the future maintenance activity.
 - The software should return measurable output for future maintenance activity.
- **Testability**
 - The software should able to be tested 100% of all feature and flow of processes.

Document Name	AR_Map_2Go!_Project_Plan_1.1.docx	Owner	PP	Page	17 / 27
Document Type	Project Management plan	Release Date	20 July 2016	Print Date	8 August 2016

1.1.3. Product transition factors

- **Portability**

- The system should be able to support Android operating system version 2.3.3 or higher with Google API 10 or higher.

- **Reusability**

- More than 20% part of finished software product should be able to be reused in future development.

1.2. Reviews/Responsibility

Stage Exit Review				
No.	Stage	Review Item	Responsibility	Reviewer
1.	Proposal	Project proposal version 1.1.1	PP	PP, JH
2.	Progress I	Project Management Plan version 1.1	PP	PP, JH
3.	Progress I	Software Requirement Specification version 1.1	PP	PP, JH
4.	Progress I	Software Design Document version 1.1	PP	PP, JH
5.	Progress I	Test Plan version 1.1	PP	PP, JH
6.	Progress I	Test Record version 1.0	PP	PP, JH
7.	Progress I	Traceability record version 1.0	PP	PP, JH
8.	Progress II	Software Requirement Specification version 2.0	PP	PP, JH
9.	Progress II	Software Design Document version 2.0	PP	PP, JH
10.	Progress II	Test Plan version 2.0	PP	PP, JH
11.	Progress II	Test Record version 2.0	PP	PP, JH

Document Name	AR_Map_2Go!_Project_Plan_1.1.docx	Owner	PP	Page	18 / 27
Document Type	Project Management plan	Release Date	20 July 2016	Print Date	8 August 2016

12.	Progress II	Traceability record version 3.0	PP	PP, JH
13.	Progress III	Software Requirement Specification version 3.0	PP	PP, JH
14.	Progress III	Software Design Document version 3.0	PP	PP, JH
15.	Progress III	Test Plan version 3.0	PP	PP, JH
16.	Progress III	Test Record version 3.0	PP	PP, JH
17.	Progress III	Traceability record version 3.0	PP	PP, JH
18.	Final progress	Software Requirement Specification version 4.0	PP	PP, JH
19.	Final progress	Software Design Document version 4.0	PP	PP, JH
20.	Final progress	Test Plan version 4.0	PP	PP, JH
21.	Final progress	Test Record version 4.0	PP	PP, JH
22.	Final progress	Traceability record version 4.0	PP	PP, JH

1.3. Testing

Testing Process		
No.	Test	Responsibility
1.	Unit Testing	PP
2.	System Testing	PP

Document Name	AR_Map_2Go!_Project_Plan_1.1.docx	Owner	PP	Page	19 / 27
Document Type	Project Management plan	Release Date	20 July 2016	Print Date	8 August 2016

Chapter Four | Software Standard

Software Development Standard

ISO29110 for Very Small Entity (VSE)

ISO 29110 is a guide applies to Very Small Entities (VSEs), enterprise, organization, department or project up to 25 people, dedicated to software development. The Guide provides Project Management and Software Implementation process which integrate practices based on the selection of ISO/IEC12207- Systems and Software Engineering –Software Life Cycle process - guidelines for the content of software life cycle process information products (documentation) standards elements.

4.1 Project Management (PM) process

PM purpose

The purpose of the Project Management process is to establish and carry out in a systematic way the tasks of the software implementation project, which allows complying with the project's objectives in the expected quality, time and costs.

PM objectives

PM.O1: The Project Plan for the execution of the project is developed according to the Statement of Work and validated with the Customer. The tasks and resources necessary to complete the work are sized and estimated.

PM.O2: Progress of the project is monitored against the Project Plan and recorded in the Progress Status Record. Corrections to remediate problems and deviations from the plan are taken when project targets are not achieved. . Appropriate treatment is taken to correct or avoid the impact of risk. Closure of the project is performed to get the Customer acceptance documented in the Acceptance Record

PM.O3: The *Change Requests* are addressed through their reception and analysis. Changes to software requirements are evaluated for cost, schedule and technical impact.

Document Name	AR_Map_2Go!_Project_Plan_1.1.d ocx	Owner	PP	Page	20 / 27
Document Type	Project Management plan	Release Date	20 July 2016	Print Date	8 August 2016

PM.O4: Review meetings with the Work Team and the Customer are held. Agreements are registered and tracked.

PM.O5: Risks are identified as they develop and during the conduct of the project.

PM.O6: A Software Version Control Strategy is developed. Items of Software Configuration are identified, defined and base lined. Modifications and releases of the items are controlled and made available to the Customer and Work Team including the storage, handling and delivery of the items.

PM.O7: Software Quality Assurance is performed to provide assurance that work products and processes comply with the Project Plan and Requirements Specification.

PM Activities

The Project Management Process has the following activities:

- PM.1 Project Planning
- PM.2 Project Plan Execution
- PM.3 Project Assessment and Control
- PM.4 Project Closure

Document Name	AR_Map_2Go!_Project_Plan_1.1.docx	Owner	PP	Page	21 / 27
Document Type	Project Management plan	Release Date	20 July 2016	Print Date	8 August 2016

4.2 Software Implementation (SI) process

SI purpose

The purpose of the Software Implementation process is the systematic performance of the analysis, design, construction, integration and tests activities for new or modified software products according to the specified requirements.

SI objectives

SI.O1: Tasks of the activities are performed through the accomplishment of the current Project Plan.

SI.O2: Software requirements are defined, analyzed for correctness and testability, approved by the Customer, base lined and communicated.

SI.O3: Software architectural and detailed design is developed and base lined. It describes the software items and internal and external interfaces of them. Consistency and traceability to software requirements are established.

SI.O4: Software components defined by the design are produced. Unit test are defined and performed to verify the consistency with requirements and the design. Traceability to the requirements and design are established.

SI.O5: Software is produced performing integration of software components and verified using Test Cases and Test Procedures. Results are recorded at the Test Report. Defects are corrected and consistency and traceability to Software Design are established.

SI.O6: A Software Configuration, that meets the Requirements Specification as agreed to with the Customer, which includes user, operation and maintenance documentations is integrated, base lined and stored at the Project Repository. Needs for changes to the Software Configuration are detected and related Change Requests are initiated.

SI.O7: Verification and Validation tasks of all required work products are performed using the defined criteria to achieve consistency among output and input products in each activity. Defects are identified, and corrected; records are stored in the Verification/Validation Results.

Document Name	AR_Map_2Go!_Project_Plan_1.1.docx	Owner	PP	Page	22 / 27
Document Type	Project Management plan	Release Date	20 July 2016	Print Date	8 August 2016

SI activities

The Software Implementation Process has the following activities:

- SI.1 Software Implementation Initiation
- SI.2 Software Requirements Analysis
- SI.3 Software Architectural and Detailed Design
- SI.4 Software Construction
- SI.5 Software Integration and Tests
- SI.6 Product Delivery

Document Name	AR_Map_2Go!_Project_Plan_1.1.docx	Owner	PP	Page	23 / 27
Document Type	Project Management plan	Release Date	20 July 2016	Print Date	8 August 2016

Chapter Five | Estimated of Tasks

5.1 Estimated Duration of Tasks

Task and Estimated Duration		
No.	Phase	Estimated Duration (Days)
1.	Proposal	35
2.	Progress I	63
3.	Progress II	63
4.	Progress III	62
5.	Final progress	31
	Total	254

5.2 Estimated Effort and Cost

Thailand Quest Hunt mobile application project is supported by College of Arts, Media and Technology, Chiang Mai University as a senior project. This project is limited supporting. The faculty will provide 500 baths for poster presentation, and will provide hardware for development base on request and other justification.

Document Name	AR_Map_2Go!_Project_Plan_1.1.docx	Owner	PP	Page	24 / 27
Document Type	Project Management plan	Release Date	20 July 2016	Print Date	8 August 2016

Chapter Six | Risks

Identification of Project Risks

Risk	Solution
Human Risks	
The member has a lot of duty to do.	- Separation of works should have equal works in each group members
Process Risks	
Scope of the project should be changed.	- Team project advises with project's advisor for suggestion. - Create a change request document and then sent to project's advisor.
Project's item cannot trace to its source.	- Create traceability record documents.

Document Name	AR_Map_2Go!_Project_Plan_1.1.docx	Owner	PP	Page	25 / 27
Document Type	Project Management plan	Release Date	20 July 2016	Print Date	8 August 2016

Chapter Seven | Version Control

7.1 Naming Conversion

AR Map 2 Go! – [File name]_[Version].[File format]

7.2 Project Repository

- GitHub: For keep all file related to project and source codes.

7.3 Configuration Item Table

No .	Item	File Name	File Type	Owner	Path	Baseline Version
1.	Project Proposal	AR Map 2Go! – Proposal_v1.1.1.docx	.docx	PP	/AR Map 2Go!/Proposal	1.0
2.	Project Management Plan	AR Map 2Go! – Project plan_v1.1.docx	.docx	PP	/AR Map 2Go!/Project Plan	1.0
3.	Software Requirement Specification	AR Map 2Go! – Requirement_v1.1.docx	.docx	PP	/AR Map 2Go!/Requirement	1.0
4.	Software Design Document	AR Map 2Go! – Design Document _v1.1.docx	.docx	PP	/AR Map 2Go!/Design Document	1.0
5.	Test Plan	AR Map 2Go! – Test Plan _v1.1.docx	.docx	PP	/AR Map 2Go!/Test Plan	1.0
6.	Test Record	AR Map 2Go! – Test Record _v1.0.docx	.docx	PP	/AR Map 2Go!/Test Record	1.0

Document Name	AR_Map_2Go!_Project_Plan_1.1.docx	Owner	PP	Page	26 / 27
Document Type	Project Management plan	Release Date	20 July 2016	Print Date	8 August 2016

7.	Traceability Record	AR Map 2Go! – Test Record – Traceability_v1.0.docx	.docx	PP	/AR Map 2Go!/Traceability	1.0
8.	Software code	AR Map 2Go! – Test Record – code_v1.0	.rar	PP	/AR Map 2Go!/code	1.0

Document Name	AR_Map_2Go!_Project_Plan_1.1.docx	Owner	PP	Page	27 / 27
Document Type	Project Management plan	Release Date	20 July 2016	Print Date	8 August 2016