Operational Concept Description (OCD)

Tour Conductor

Team No. 05

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Version History

Date	Author	Version	Changes made	Rationale
10/13/2015	JM	1.0	• Initial Version Draft	• Initial Version Draft
10/19/2015	JM	1.1	• Updated ER and business workflow diagram	• Update according to ARB feedback
11/05/2015	JM	2.0	• Fixed Program Model	• Program model was missing costs and benefits.
11/15/2015	JM	2.1	• Create tours and Take tours are not in your program model, but they are in your results chain as initiatives.	• Based on team members feedback.
11/30/2015	JM	3.0	• Modified the Capabilities Goals: deleted the Owner's capability to give or withhold permission for tour creation; added the tour creator's capability of viewing, editing, and deleting tours; added tour taker capability to navigate through the tour from stop to stop; and added tour taker capability to see the list of stops by swiping the screen from left to right. • Changed capabilities goals' priority format from numbers to descriptive keywords such as " Must have." • Modified the program model by adding "Create Tours" and "Take Tours" to the initiatives.	• Based on discussions with client and change of requirement, and TA feedback.

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1. Introduction

1.1 Purpose of the OCD

This document explores the shared visions and the value propositions of the stakeholders of the Tour Conductor project, along with the system's objectives, constraints and priorities.

The success-critical stakeholders of the project are David Klappholz, as the project owner and maintainer; the Tour Creators and Tour takers, as users; and the members of Team 5, as developers.

1.2 Status of the OCD

The OCD is currently at version 3.0 As Built for package submission. We fixed the program model according to the latest feedback, and we modified the Capabilities Goals, based on discussion with the client and changes in requirements, by deleting the owner's capability to give or withhold permission for tour creation, and added the tour creator's capability of viewing, editing, and deleting tours. We also changed capabilities goals' priority format from numbers to descriptive keywords such as " Must have."
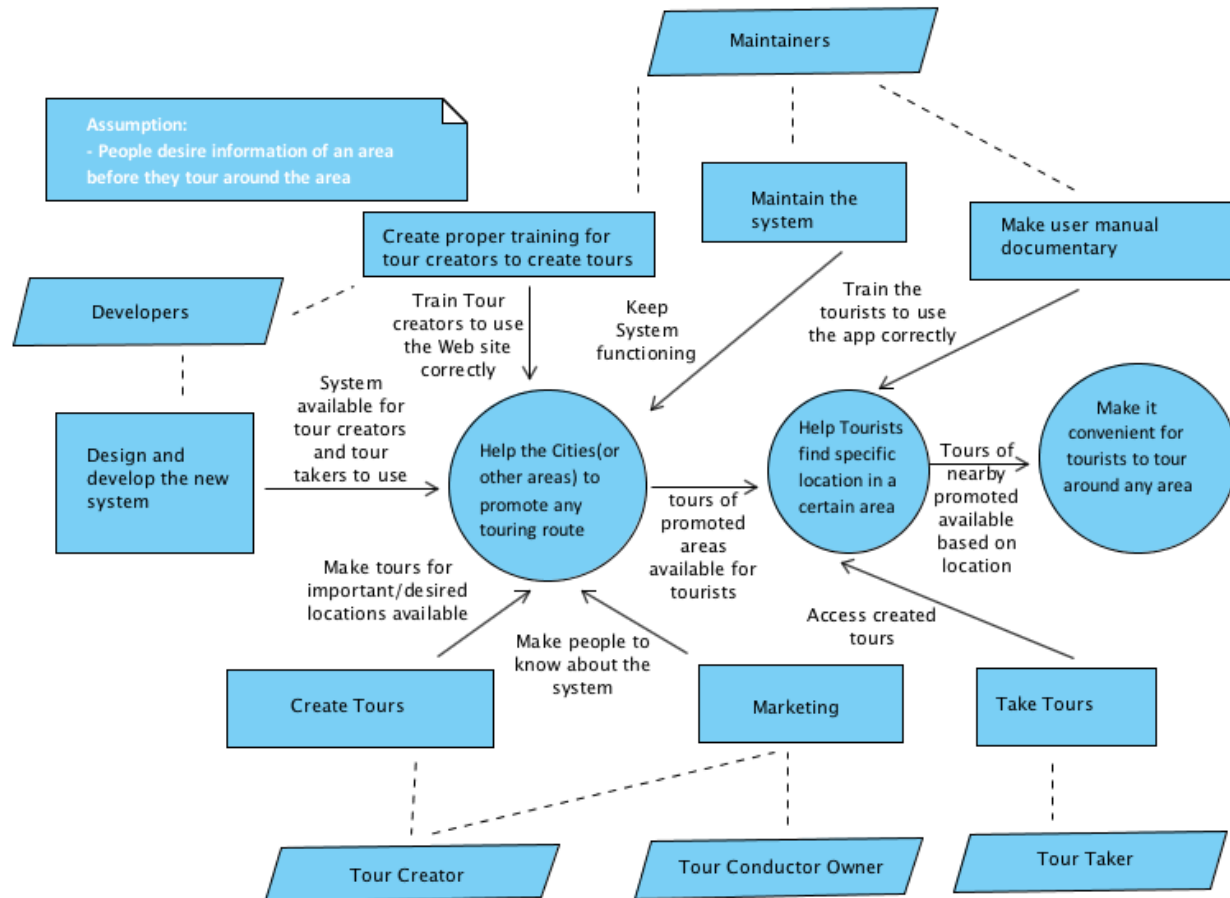
2. Shared Vision

Following is our Program Model that we used to identify initiatives and to facilitate designing and managing our project.

Assumptions: People desire information of an area before they tour around the area			
Stakeholders	**Initiatives**	**Value Propositions**	**Beneficiaries**
• Tour creator • Tour taker • Developers • Maintainers • Client	• Design and develop the new system • Market the system • Create proper training for admin to create tours • Make user manual documentary • Create Tours • Take Tours	• Make it convenient for users to tour around any area • Help users find specific location in a certain area • Help the Cities(or other areas) to promote any touring route	• Tour creator • Tour taker
Cost		**Benefits**	
• Development costs • Maintenance costs • Web hosting, domain name, and services(e.g google APIs)		• Increase number of tour creators • Increase number of tour takers • Increase Number of tourists at significant locations	

Table 1: The Program Model

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2.1 Benefits Chain

Figure 1: Benefits Chain Diagram for Tour Conductor.

2.2 System Capability Description

- The Goal of the Tour Conductor project is to allow people to conveniently tour places and areas. It also aims to help cities, schools, and other organizations (or even individuals) to better promote their areas. Thus, our target customers are such organizations and cities, along with all mobile phone users who are interested in touring certain areas.
- The system consists of two main application: a Web application that allow users (Tour Creators) to create tours, and a mobile application that allow users (Tour Takers) to take tours.

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- The system uses Google Maps APIs, and therefore covers all the areas that the foregoing APIs covers.

2.3 System Boundary and Environment

All the services and functions that we will be developing or using can be summarized in the following system boundary and environment diagram.
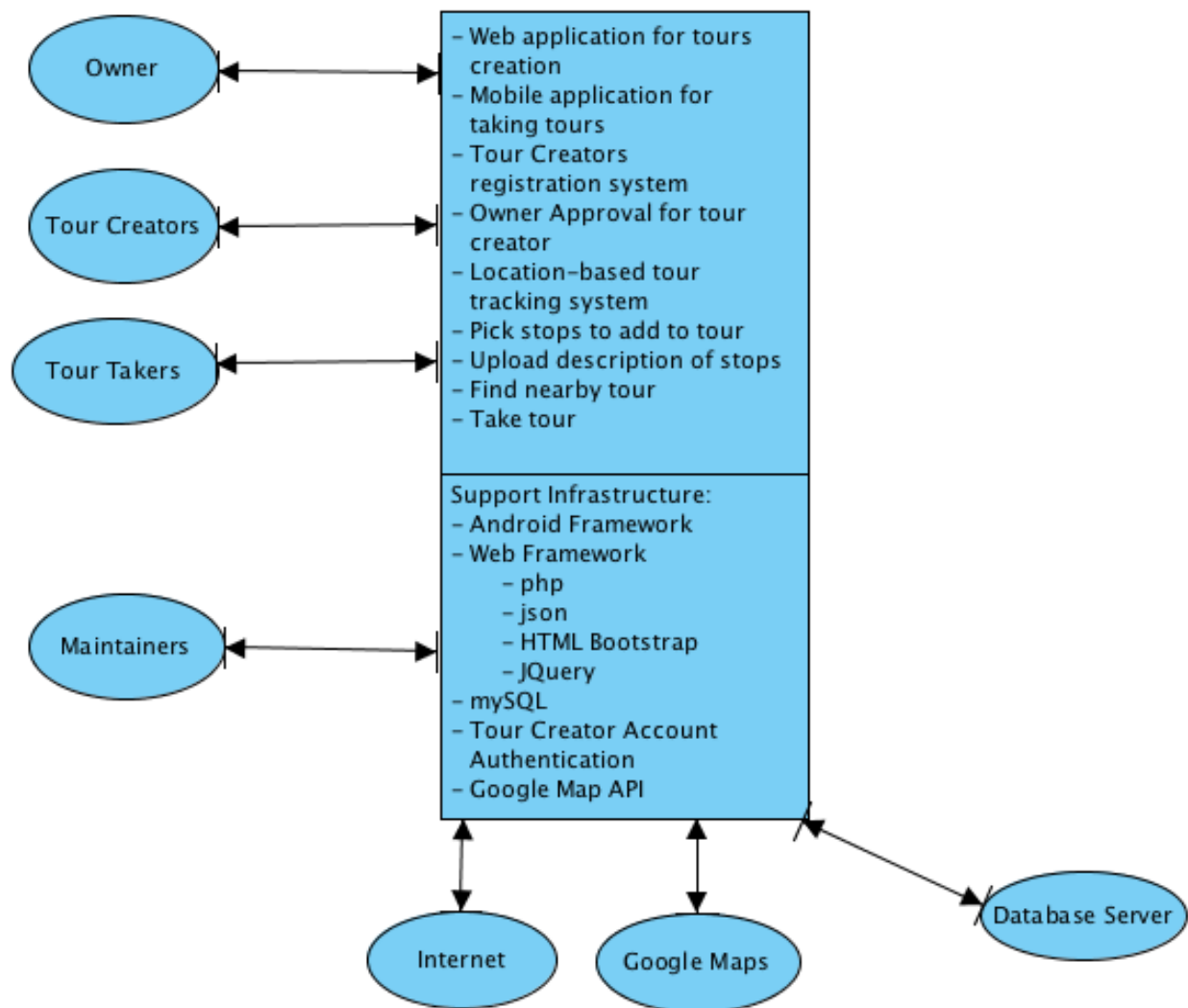

Figure 2: System Boundary and Environment Diagram

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3. System Transformation

3.1 Information on Current System

3.1.1 Infrastructure

There is no legacy system. We are building the project from scratch.

3.1.2 Artifacts

Artifact	Description
N/A	N/A

3.1.3 Current Business Workflow

N/A

3.2 System Objectives, Constraints and Priorities

3.2.1 Capability Goals

Tour Conductor will consist of a website that will allow tour creators to sign up for an account and create tours by picking specific stops in the area they want to promote, along with a mobile application that allows tour takers to take the created tours. Moreover, the owner must be able to approve and dismiss the created tours. If the owner approves a certain tour, the tour becomes available for tour takers on the Mobile app. Otherwise, the tour will be dismissed.

Capability Goals	Priority Level
OC-1: Tour Creator Sign-up: Tour Creators are capable of creating accounts on Tour Conductor's Website.	**Must Have**
OC-2: Tour Creation: Tour Creators are capable of creating tours of specific areas that they wish to promote on Tour Conductor's Website.	**Must Have**
OC-3: Location-Based Touring: Tour Takers are capable of accessing and taking all tours of areas near their location, on Tour Conductor's mobile app.	**Must Have**

OC-4: Tag-based Location Search: Tour Takers are capable of searching tours areas according to specific tags describing the desired areas, on Tour Conductor's mobile app.	**Must Have**
OC-5: View, Edit, and Delete Existing Tours: Tour Creators are capable of viewing, editing, and deleting tours they have already created, on Tour Conductor's website.	**Must Have**
OC-6: Navigate through tour from stop to stop: Tour Taker can take a tour by going from stop to another, using Google navigation, on Tour Conductor's mobile app.	**Must Have**
OC-7: Swipe through all stops on mobile screen: Tour Taker can view the list of stops by swiping the screen from left to right, .	**Must Have**

3.2.2   Level of Service Goals

Level of Service Goals	Priority Level	Referred WinWin Agreements
LOS-1: The system shall be user-friendly and intuitive.	Must Have	WC_3757
LOS-2: The system shall render the searched tours correctly on mobile platforms.	Must Have	WC_3758

Table 2: Level of Service Goals

3.2.3   Organizational Goals

OG-1: Make it convenient for users to tour around any area

OG-2: Help users find specific location in a certain area

OG-3: Help the Cities(or other areas) to promote any touring route

3.2.4   Constraints

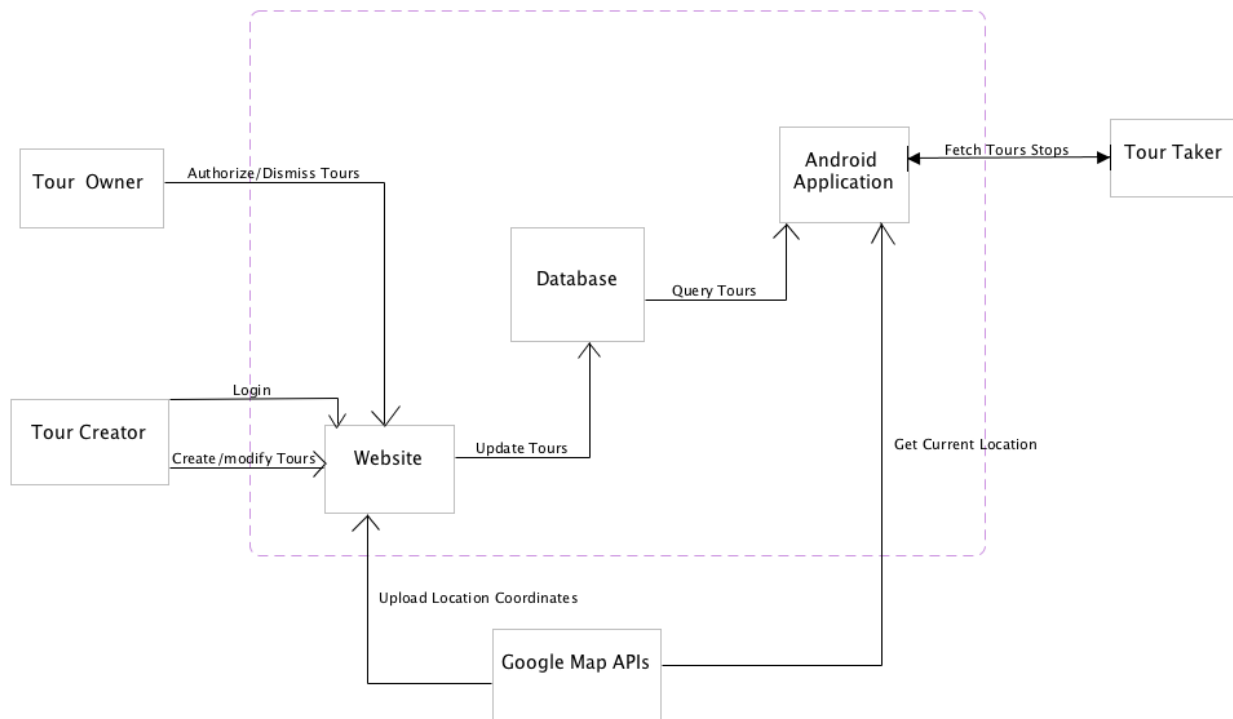**CO-1: Android 4.0 as an Operating System:** The mobile application must work on Android 4.0 (ICS) and above.
CO-3: Local Host as Web Server: School and client are not providing web server.

3.2.5   Relation to Current System

N/A

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3.3 Proposed New Operational Concept

3.3.1 Element Relationship Diagram

Figure 4: Element Relationship Diagram
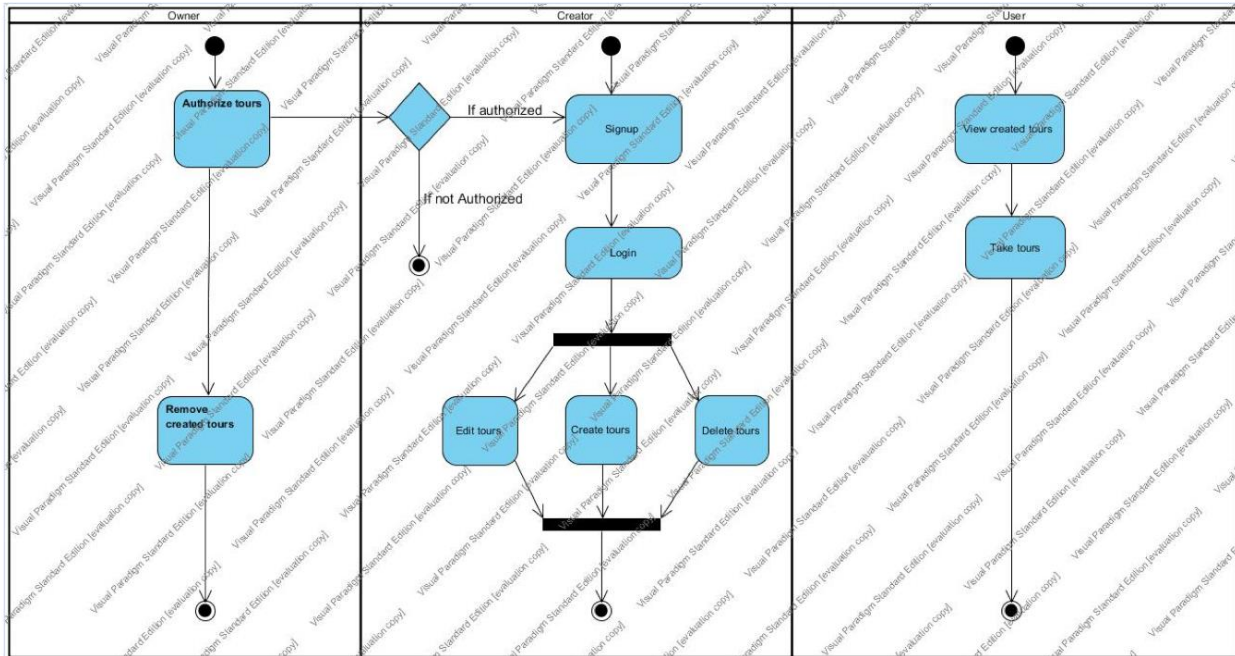
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3.3.2 Business Workflows

Figure5: Business Workflow Diagram of the Tour Conductor

3.4 Organizational and Operational Implications

3.4.1 Organizational Transformations

There is no current system. We are building a new system. However, from an organizational structure point of view, there will be an owner for the app, currently it is our client David Klappholz. He will also be the maintainer of the project. Our team is designing and developing the new system, and our roles are listed at the beginning of this document.