



# WORK BREAKDOWN STRUCTURE

8/23/2013

Graduate Capstone



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## 0 Introduction

The purpose of this document is to show a detailed structure of the tasks in the project.

### 0.1 References

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- <http://www.harborlightmanagement.com/Publications/WBS%20outline.pdf>

### 0.2 Revision History

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Name	Date	Reason For Change	Version
Andy Bottom	04/16/2013	Created Work Breakdown Structure	1.0





# 1. Project

## 1.1. Pre-Project

### 1.1.1. Research

- 1.1.1.1. Mobile Development
- 1.1.1.2. Implementation
- 1.1.1.3. Restful Web Services

### 1.1.2. Project Setup

- 1.1.2.1. Software
- 1.1.2.2. Web Server
- 1.1.2.3. Database
- 1.1.2.4. Obtain Licenses

### 1.1.3. Brainstorm Ideas

- 1.1.3.1. Chose Project
- 1.1.3.2. Research
- 1.1.3.3. Market Need

## 1.2. Inception

- 1.2.1. Vision and Scope Document
- 1.2.2. System Scope
- 1.2.3. Risks
- 1.2.4. Work Breakdown Structure
- 1.2.5. Setup Website Documentation
- 1.2.6. Test Plan
- 1.2.7. User Experience Guide
- 1.2.8. User Manuals
- 1.2.9. Developer Guide





## 1.3. Design

### 1.3.1. Overall System

### 1.3.2. Database

- 1.3.2.1. ERD
- 1.3.2.2. Structure
- 1.3.2.3. Tables

### 1.3.3. Web Services

- 1.3.3.1. Structure
- 1.3.3.2. Diagram

### 1.3.4. Phone Development

- 1.3.4.1. Class Diagram
- 1.3.4.2. Design Pattern

## 1.4. Development

### 1.4.1. Database

- 1.4.1.1. Create Tables
- 1.4.1.2. Implement SQL

### 1.4.2. Web Services

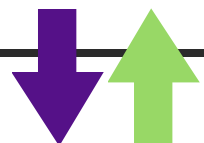
- 1.4.2.1. Implement Database Query
- 1.4.2.2. Implement URI Mapping

### 1.4.3. Administrator Website

- 1.4.3.1. Classes
- 1.4.3.2. Code-Behind
- 1.4.3.3. User Interface

### 1.4.4. Phone OS

- 1.4.4.1. Backend Code (Cross Platform)
- 1.4.4.2. Windows Phone UI / Hookup
- 1.4.4.3. Android UI / Hookup
- 1.4.4.4. iOS UI / Hookup



## **1.5. Testing**

### **1.5.1. Integration Testing**

- 1.5.1.1. Web Service to Database
- 1.5.1.2. Admin CMS to Web Services
- 1.5.1.3. Web Services to Web Driver
- 1.5.1.4. PCL to Web Services
- 1.5.1.5. Windows Phone to PCL
- 1.5.1.6. Android Phone to PCL

### **1.5.2. Performance Testing**

- 1.5.2.1. Database Connections
- 1.5.2.2. Recursive Database Calls
- 1.5.2.3. Web Service Response Time
- 1.5.2.4. Web Service JSON File Size
- 1.5.2.5. PCL Async Response Time

### **1.5.3. User Acceptance Testing**

- 1.5.3.1. Web Admin CMS
- 1.5.3.2. Windows Phone
- 1.5.3.3. Android Phone

### **1.5.4. Web Services**

- 1.5.4.1. Set up Correctly
- 1.5.4.2. Expecting correct logic

### **1.5.5. Web Admin**

- 1.5.5.1. Valid Data Checking

### **1.5.6. Phones**

- 1.5.6.1. Backend Logic Correct
- 1.5.6.2. Handle data effectively
- 1.5.6.3. Effect UI / Self Intuitive
- 1.5.6.4. Data Validation





## **1.6. Release**

1.6.1. Effective Deployment

1.6.2. Out to Marketplace

## **1.7. Maintenance**

1.7.1. Bug Fixes

1.7.2. Feature Updates

