



# Project Plan

## Assignment 1

*- Personal planning, Vision and Project Plan*



31 Jan, 2017

*Semester:* Spring 2017

*Course:* Software Technology

*Author:* Sarpreet Singh Buttar

**Contents**

<b>1</b>	<b>Introduction</b>	<b>1</b>
1.1	Purpose . . . . .	1
1.2	Background . . . . .	1
1.3	Scope . . . . .	1
1.4	Project Goals . . . . .	1
1.5	Stakeholders Goals . . . . .	2
1.6	Resources . . . . .	2
1.6.1	Man-Power . . . . .	2
1.6.2	Tools . . . . .	2
1.7	Risks . . . . .	2
1.8	Project Plan Versions . . . . .	3
<b>2</b>	<b>Development Process</b>	<b>3</b>
2.1	Iteration # 1 (Personal Planning, Vision and Project Plan) . . . . .	3
2.1.1	Goal . . . . .	3
2.1.2	Work Breakdown Structure . . . . .	3
2.1.3	Milestones . . . . .	3
2.1.4	Iteration Deliverables . . . . .	4

# 1 Introduction

## 1.1 Purpose

The purpose of this project plan document is to achieve the followings objectives:

- complete the partially implemented back-end (server) with all the features that are present in the API specification such as create, read, update and delete (CRUD) a book.
- Testing the back-end functionality of the system.

## 1.2 Background

The given web application is a book library system and its purpose is to create, read, update and delete (CRUD) a book. It is a half-finished web application consists of two modules, the first module is a fully functional front end (client) which we will use to verify the code that we will write during the development of the partially implemented back end (server). The application stack is developed in a modern way which means these two modules will communicate via HTTP request specified in a given API. In result, no rendering is performed on server side because front end is implemented using Single Page Application (SPA) architecture and the only way to know how to communicate is to follow the API. Furthermore, for executing the application server, a virtual machine is required that is managed by Vagrant whereas the client side is executed in web browser.

## 1.3 Scope

This project plan applies to achieve the following *requirements*:

1. Create a book
2. Modify or Update a book
3. Delete a book
4. Testing back-end functionality of the system

## 1.4 Project Goals

The development phase follow the iterative process principles. In total there will be 4 iterations. The goal and end date of each iteration is as follows:

Iteration #	Goal	End Date
Iteration #1	Present a list of books as a JSON object (an associative array) for the user when the client requests it using <code>http://localhost:9090/api/books/</code> to the server.	31/01/17
Iteration #2	To be announced (TBA)	TBA
Iteration #3	TBA	TBA
Iteration #4	TBA	TBA

## 1.5 Stakeholders Goals

Stakeholder	Goal
User	Wants to create, update and delete a book using API
Developers	Wants fully tested back-end functionality of the system

## 1.6 Resources

The development process will use following resources:

### 1.6.1 Man-Power

- *Role:* Implementer
- *Worker:* 1
- *Responsibility:* Everything

### 1.6.2 Tools

- Atom
  - *Type:* Editor
  - *Purpose:* Implementation
- Vagrant
  - *Type:* Virtual Machine
  - *Purpose:* Code executor

## 1.7 Risks

Following are the possible problems which might occur during the development:

1. I am the only person working on this assignment and I might become unable to work on it because I have one part time work and two other courses to study.
  - *Effect:* The assignment will suffer greatly and ultimately might become a failure.
  - *Occurrence Level:* Medium
  - *Solution:* None
2. I have never programmed in editor.
  - *Effect:* It might be more time-consuming for me to implement.
  - *Occurrence Level:* High
  - *Solution:* Take this into consideration when planning the schedule.
3. I have never worked with vagrant.
  - *Effect:* It might show some error which I am not aware of and slow down the development process.
  - *Occurrence Level:* High
  - *Solution:* Take this into consideration when planning the schedule.

## 1.8 Project Plan Versions

Date	Version	Changes Made
31 Jan 2017	1.0	-

## 2 Development Process

The development is divided in to three iterations. In this section, each iteration is describe in detail.

### 2.1 Iteration # 1 (Personal Planning, Vision and Project Plan)

#### 2.1.1 Goal

The goal of this iteration is to:

- present a list of books as a JSON object (an associative array) for the user when the client requests it using `http://localhost:9090/api/books/` to the server
- Create a vision document
- Create a project plan

#### 2.1.2 Work Breakdown Structure

For achieving the goal, this iteration is further divided into three tasks.

No.	Task Name	Goal
1	Personal Planning	Present a list of books as a JSON object (an associative array) for the user when the client requests it using <code>http://localhost:9090/api/books/</code> to the server
2	Vision	Create a vision document
3	Project Plan	Create a project plan

In addition, Task #1 is further divided into three subtasks,

No.	Subtask Name	Goal
1	Books	Create a list of books and a method to get them
2	JSON	Convert Java objects into JSON objects and show in the terminal
3	Web	Display JSON objects on screen

#### 2.1.3 Milestones

No.	Milestone	End date
1	Task 1 (Personal Planning) including all subtasks	28 Jan 2017
2	Task 2 (Vision)	28 Jan 2017
3	Task 3 (Project Plan)	31 Jan 2017

#### 2.1.4 Iteration Deliverables

1. **Time Log:** It represents the time spent on each task during this iteration including start and end date.
2. **Source Code:** All the the source code implemented in this iteration.
3. **Vision Document:** It represents general picture or description of the system.
4. **Report on Personal Reflection:** It represents the personal reflection on each task in this iteration.
5. **Project Plan:** It represents the general and Iteration #1 plan.