Museum Booking System
Project Plan

Version 1.3

Revision History

Date	Version	Description	Author
2014-10-31	0.1	Initial Draft	Alessandro Baggio
2014-10-31	0.2	Remake of the Introduction Section	Stefano Campanella
2014-11-1	0.3	Added Timing tables	Endri Azizi
2014-11-2	0.4	Editing of sections 1 and 2	Stefano Campanella
2014-11-3	0.5	Remake of Activity plan section and main index	Stefano Campanella
2014-11-03	1.0	Refined section 4	Sebastian Kunze
2014-11-03	1.1	Updated meetings schedules	Stefano Campanella
2014-11-17	1.2	Updated meetings schedules	Stefano Campanella
2015-01-08	1.3	Document revision, visual finalization for v1.3 version	Endri Azizi and Valerio Lucantonio

Content table

1. Introduction

1.1 Purpose of this document

The first purpose of this document is to be the general guideline in the development process of the BookEasy project, to give an idea of its scope, organization and phases of the development process.

1.2 Document Organization

This document presents a general overview of the context in which the product will be developed, initially describing the background and in the following sections describing the organization structure of the development team, the agreed conventions and the expected plan in terms of timings.

1.3 Intended Audience

This document is mainly written for the development team for making sure they all share the same vision of the project.
Secondarily it is written for the supervisors of the team to give them a summary on how the project is intended to be and how it is planned.

1.4 Scope

This document tries to address the general shape the final product will have and the process used to develop it. It defines all the rules, conventions, standards and guidelines that the team has decided to use and the overall organization of the team, including internal roles and development process.

1.5 Definitions and acronyms

1.5.1 Definitions

Keyword	Definitions
Project Customer	The customer who requested the software product
Museum Customer	A customer that wants to book a flight simulation
Company	A group of customers that want to book a set flight simulations all together
Staff (or admin)	The staff of the museum
Instructor	A member of the staff who guides museum customers in flight simulations
Coordinator	A member of the staff, who is responsible for approving bookings and make sure all of them have assigned instructors
Time slot	An interval of time for the bookings

1.5.2 Acronyms and abbreviations

Acronym or abbreviation	Definitions
DSD	Distributed Software Development. It's the course in which this project is being developed

2. Background and Objectives

2.1 Background

The aviation museum in Västerås (Västerås Flygmuseum) offers its customers the opportunity to book and fly in a number of flight simulators.
Currently, customers call or e-mail a representative of the museum to book their simulator flight or make their ad-hoc booking at the museum reception during opening hours.
Bookings made in advance are registered in a calendar application on the XOOPS platform. On Sundays, those booking are transferred to another application to ensure they don't collide with the bookings that come during the day.

2.2 Project goal

The goal of the project is to create a system that can substitute the current booking process, dealing with the scheduling of instructors shifts, simulators timeslots and allowing customers to book flights in advance.
In addition the system should provide notifications to instructors in order to inform them of their simulations schedule.

2.3. Requirements

This is a short overview of the main requirements the product needs to meet.
Note that a more in-depth analysis of the project requirements will be provided in a separate document.

2.3.1 Booking

The system should allow customers or companies to book a flight. To do this, the system should be able to show a time table to the customer in which the currently free time slots are indicated.

2.3.2 Administration

The system should allow the staff of the museum to insert new free time slot or update the status of a time slot. In addition the staff should be able to insert new booking in the system by hand.

2.3.3 Instructors

Instructors should be able to access the system and gather informations regarding their personal flight schedule.

2.3.4 Simulators & Instructors

Since not all instructors can teach at each simulators, the system should be able to verify (given a time slot) whether there is an instructor able to teach on a simulator.

3. Organization

3.1 Project group

The development team is composed by 9 members:

5 from *Politecnico di Milano*:

- Alessandro Baggio,
- Stefano Campanella,
- Marco Edemanti,
- Mert Ergun,
- Paolo Manca.

And 4 from *Mälardalen University*:

- Endri Azizi,
- Robert Engelmann,
- Sebastian Kunze,
- Valerio Lucantonio

All contact info and more insight on each team member is available on the project home page: http://www.fer.unizg.hr/rasip/dsd/projects/museum_booking_system

3.2 Roles

The team will use the Scrum development process (see section 4. Development process), so the only fixed roles defined in the team are:

- *Scrum Master*, assigned to Sebastian Kunze
- *Product Owner*, assigned to Robert Engelmann

All other roles that may be needed will be assigned based on the tasks each member will take during the development.

3.3 Customer

The customer of the product is *Mr. Thijmen de Gooijer*, who is the representant of the museum for this project.
During the first phases of the project *Mr. Mikael Melander* (another representant of the museum) will act as customer while Mr de Gooijer is not available.

3.4 Supervisors

The team will have two supervisors in this project.

- *Omar Jaradat* is the local supervisor, being located in Sweden, where the customer is.
- *Elisabetta Di Nitto* is the remote supervisor, following the development from Milan

3.5 Communication

Since the project is developed in the context of the DSD course and the members of the team are not in the same location, all communications will be done over the internet, with appropriate tools (see next section 3.6).

The team has a fixed meeting every week on Mondays from 16.00 to 18.00 or from 17.00 to 19.00, with the initial participation of the supervisors.

Summary meetings for getting quick status updates are scheduled on Thursdays from 18.15 to 19.00.

During all the meetings one team member will be assigned to the task of keeping the meeting minutes and make a summary document at the end of it, in order to minimize the possibility of misunderstandings and keep up-to-date any missing members.

3.6 Tools

The team will use the following tools for coordinating, sharing work and communicating:

- *GitHub:* will be used as code repository
- *Google Docs:* will be used as documents repository
- *Doodle:* will be used for organizing meetings
- *Google Calendar:* will be used for keeping events schedule once it is set
- *Skype:* will be used for meetings and contacting
- *Asana:* will be used for keeping the Scrum backlog, used as help in the development process

4. Development process

The team chose to follow an agile approach using the software development framework called Scrum. Communication and customer collaboration are two key aspects on the base of this approach. The application is developed within iterations called Sprints that last for fourteen days.

4.1. Sprint Planning

The team will meet on a fortnightly basis on Monday meetings to plan activities for the next two weeks. They will estimate the workload and commit to a certain amount of tasks. All tasks will be discussed in detail together with the Product Owner beforehand in order to clarify open questions.

4.2. Sprint Review

After a Sprint, the team will review and present their work to the Product Owner. Uncompleted work can not be presented and is postponed to the next Sprint if desired by the Product Owner.

4.3. Sprint Retrospective

To further improve the development process, the team is going to evaluate the past Sprint right after the Sprint Review. Thereby, two questions are raised during the meeting:

- What went well during last Sprint and
- what can be improved in the next Sprint?

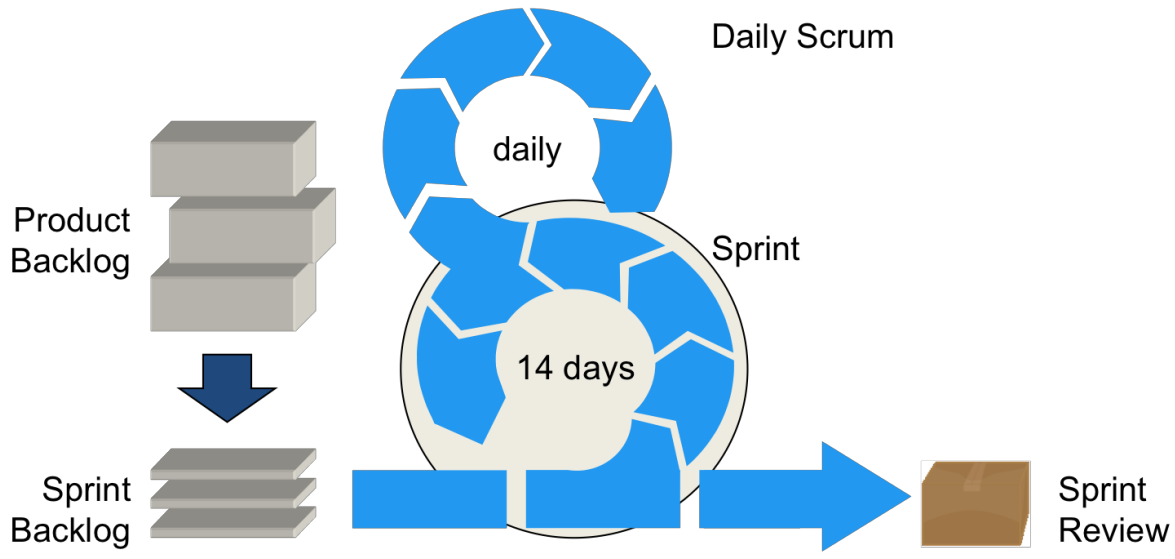
Everybody of the team is invited to contribute the discussion to improve communication and customer collaboration.

4.4. Daily Scrum meeting

Within a “daily” meeting, every team member is going to answer the following two questions:

- What have I done since last meeting,
- what am I going to do until next meeting and
- what impediments block me from doing it.

It is the Scrum Master’s job to remove those impediments so the team can get the job done.



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5. Deliverables

There are some deliverables scheduled for the project::

- *Project Vision presentation*: a quick presentation of the nature and organization of the project
- *Project Plan document (This Document):* A more in-depth document describing the backgrounds of the project, how the team is organized and what conventions and standards are adopted.
- *Project Requirements and Architecture (with presentation):* A document describing all the requirements the final product will need to satisfy and a general idea of its architecture
- *Design Document:* A more in-depth document about the architecture, structure and technologies adopted for the final product.
- *Alpha prototype (with presentation):* A first prototype of the product
- *Beta prototype (with presentation):* A second prototype of the product
- *Testing report:* A document describing all the test the final product will need to pass to be accepted at release candidate.
- *Final product (with presentation):* the final form of the product

6. Project plan

This section presents the project estimated plan, it lists the activities and milestones along with their estimated ending dates.

6.1 Time schedule

The table below shows the milestones.

Id	Milestone description	Finished week			
		Plan	Forecast		Actual
			Week	+/-	
M-001	Project Vision		44		
M-002	Initial task definition		45		
M-003	Requirement and design		46		
M-004	Alpha prototype		49		
M-005	Beta Prototype		51		
M-006	Final presentation		2		

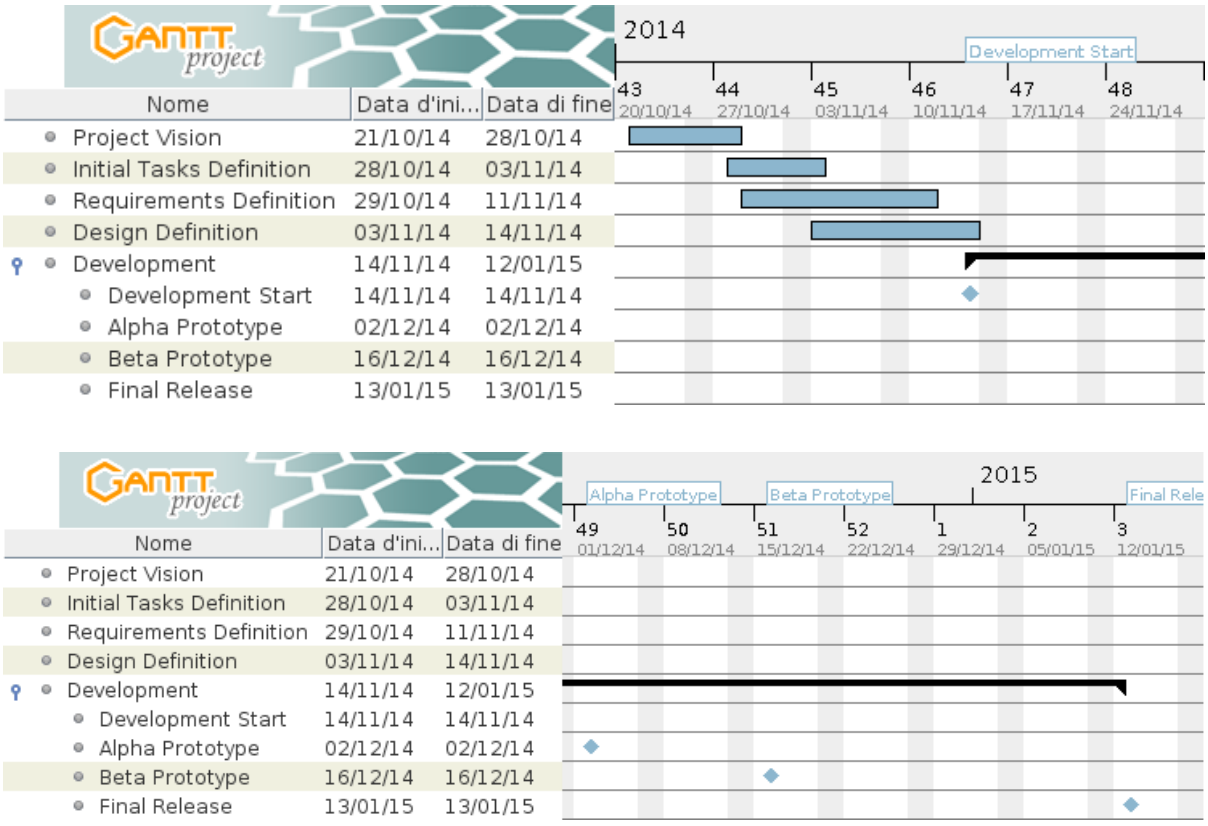
Planned Scrum Sprints

Sprint #	Start Date	End Date
1	Nov 3rd, 2014	Nov 17th, 2014

2	Nov 17th, 2014	Dec 1st, 2014
3	Dec 1st, 2014	Dec 15th, 2014
4	Dec 15th, 2014	Dec 29th, 2014
5	Dec 29th, 2014	Jan 5th, 2015

6.2 Activity plan

The activity plan is presented in the Gantt chart below. The activities and milestones are shown.



7. Project risks

The team has detected three possible risks they may encounter during the development process:

- *Lack of Communication*: since this is a distributed project, there may be problems with the flow of information between the members. To avoid misunderstandings and loss of information the team will keep meeting minutes of all the decisions taken in the meetings
- *Team & Customer Availability*: the team is not only distributed but it is also quite big and it needs to coordinate with the customer. Problems may arise in finding the right moments to schedule meeting with all the parties. To avoid this kind of problems the team will try to plan all events early and keep a high level of exchange of information
- *High Workload*: some tasks in the process may require more time to complete than expected. To avoid problems with exceeding the deadlines all planning will be done in early stages and the team will take advantage of having a large number of members, assigning more of them to the tasks that reveal to be heavier than expected