

Fall 2022 CEG-6110-10

Introduction to Software Engineering

Software Development Plan (Agile)

Project Title

- Hotel Reservation

Project Synopsis

- The Hotel reservation system helps users to book hotels at desired location in online

Concept of Operations (CONOPS):

- Hotel reservation it provides a webpage for giving suggestions about hotels according to the location provided by the user and it helps to book a hotel online.
- We will be developing a UI webpage that consists of a button which helps the users to search the hotels by giving location as input and it gives suggestion of hotels at particular location with all the facilities.
- The user details like booking id, name, phone number, email address, check in and out date and time are stored in database.
- The programming language we use for developing the code is javascript, HTML, CSS and Bootstrap.
- We do J-unit Testing for testing the user stories.
- We also want to develop the tool based on the feedback provided by the user in the future.
- As the primary user interface for managing the website, the generated code will execute in a terminal window on a local host server.
- The user website will provide inputs to the website, which will then store the data in a database.

Development Methodology:

- Agile.

- Doxygen will be used to follow requirements through the code.
- To record important design choices, a basic design document will be created.
- To record important design choices, a basic design document will be created.

Identify Roles:

- Product Owner – Mahendranath
- Team – Sai Kumar, Rajesh, Manohar, Vishnu
- Scrum Master – Vidya

Schedule:

- Project Start Date: 9/20/2022
- Sprint Duration: 15days starting from 9/14/2022
- Project End Date: 12/5/2022.
- Sprint Starts:
 1. 9/20/2022
 2. 10/5/2022
 3. 10/20/2022
 4. 11/5/2022
 5. 11/20/2022
 6. 12/5/2022

Software Development Environment:

- Hardware: Dell, Lenovo
- Operating System: Windows
- Compiler/Linker Tools: MySQL workbench, Visual Studio Code.
- Doxygen
- GitHub

Configuration Management:

- GitHub
- Items will be configured as follows:

1. Documents, upon initial development
2. Software, upon initial development and passing
3. The software pulls will only occur when agreed upon by the team.

Target Environment:

- Hardware: Apple MacBook Pro, Dell
- Operating System: OSX, windows
- A goal is to develop the software in a manner that will it be easily targeted to other target environments such as Linux, and Windows.

Identify the Product Backlog:

- The following identifies the initial backlog.
- Updates to the backlog will be maintained as part of the print reviews
- The Product Backlog uses the designation of HL to identify the High-Level product backlog.

		Verificati -on			
Rqt #	Requirement	T	D	A	I
	<u>Home Page</u>				
HL-110	Navigation bar consists of home,bookings, about and contact.	T	D		
HL-120	Search engine for getting hotel information for given location.	T	D		
HL-130	Book now button used to load a new booking page.	T	D		
HL-140	In booking page user enters the required details and gets a booking ID.				
	<u>Booking Page</u>				
HL-210	It has three options like view booking, update booking and cancel booking.	T	D		
HL-220	In view booking, user can view his booking details.	T	D		
HL-230	In update booking, user can update his booking details by giving the booking Id.	T	D		

HL-240	In cancel booking, user can cancel his booking at the hotel.	T	D		
	<u>About Page</u>				
HL-310	This page has information which is generally used for reference while booking, update and cancelling.		D		
	<u>ContactUs Page</u>				
HL-410	Page contains toll-free number and email address for any information.		D		
	T - Test				
	D - Demonstrate				
	A - Analysis				
	I - Inspection				

Identify Initial Sprint Backlog:

The following identifies the initial estimate of items to be worked in each sprint.

Sprint 1 – 9/20/2022

- Setup development environments like MySQL workbench and visual studio.
- Setup GitHub for Version Control.
- Develop basic functionality.
- Identify the working model overview for the website.
- Check-in items that are complete to git.

Sprint 2 – 10/5/2022

- Develop the Home page and testing it.
- Setting up the database.

Sprint 3 – 10/20/2022

- Develop the About and contact us page.
- Develop the Book now button functionality.
- Develop the view booking, update booking and cancel booking pages.

Sprint 4 – 11/5/2022

- Connecting the database to the webpage.
- Creation of tables and related queries.

Sprint 5 – 11/20/2022

- Testing the database queries.
- Testing the connection of db with webpage.

Sprint 6 – 12/5/2022

- Writing testcases for each module.
- Checking code coverage and doxygen file.
- Cleanup and demonstration.

Sprint Execution:

- The sprint planning and review sessions shall adhere to the framework described below. Due to the team's condensed work schedule and the confluence of the sprint planning, retro, and review sessions.

Sprint Planning:

Inputs:

- Product Backlog
- Sprint backlog
- Any required technical Information (interface definitions, etc.)

Team Activity:

- Product Owner – Updates product backlog to contain updated requirements.
- Scrum Master – Works with the team and product owner to define the new sprint backlog.
- Development Team – Provides feedback on task efforts and sprint backlog.

- All members define what “Done” is.

Outputs:

- Refined product backlog
- Updated sprint backlog

Daily Scrum:

Inputs:

- Sprint Backlog.

Team Activity:

- Scrum master – polls the team as to the status
- Development Team – provides status on progress and other needs

Outputs:

- Updated sprint backlog
- Meeting minutes (Date, Time, Attendees, at a minimum)

Sprint Review:

Inputs:

- Sprint Backlog.

Team Activity:

- Sprint Review
- Stake Holders updated with latest status.

Output:

- Delivered new software capability (Increment)