
Group Nice

Nice H&R
Software Development Plan (Small Project)
Version <1.0>

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Software Development Plan (Small Project)	Date: 28/10/2023
<document identifier>	

Revision History

Date	Version	Description	Author
28/10/2023	1.0	First Version	Group Nice
07/11/2023	2.0	PA2 Version	Minh, Thảo

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Software Development Plan (Small Project)

1. Introduction

1.1 Purpose

The purpose of the *Software Development Plan* is to gather all information necessary to control the project. It describes the approach to the development of the software and is the top-level plan generated and used by managers to direct the development effort.

The following people use the *Software Development Plan*:

- The **project manager** uses it to plan the project schedule and resource needs, and to track progress against the schedule.
- **Project team members** use it to understand what they need to do, when they need to do it, and what other activities they are dependent upon.

1.2 Scope

This *Software Development Plan* describes the overall plan to be used by the Nice H&R project, including deployment of the product. The details of the individual iterations will be described in the Iteration Plans. The plans as outlined in this document are based upon the product requirements as defined in the *Vision Document*.

1.3 Overview

This *Software Development Plan* contains the following information:

Project Overview — provides a description of the project's purpose, scope, and objectives. It also defines the deliverables that the project is expected to deliver.

Project Organization — describes the organizational structure of the project team.

2. Project Overview

2.1 Project Purpose, Scope, and Objectives

- The purpose of this project is to develop and launch the Managing Hotel and Restaurant App, a comprehensive software solution designed for hotel and restaurant owners and managers to streamline the management of their establishments. The app aims to enhance operational efficiency, improve customer satisfaction, and provide effective tools for reservation management, staff scheduling, financial control, and menu updates.

2.2 Assumptions and Constraints

- This project must be finished before the course “Introduction to Software Engineering” ends (12 weeks)
- Each milestone must be completed within a limited time frame in order to finish to website in time

2.3 Project Deliverables

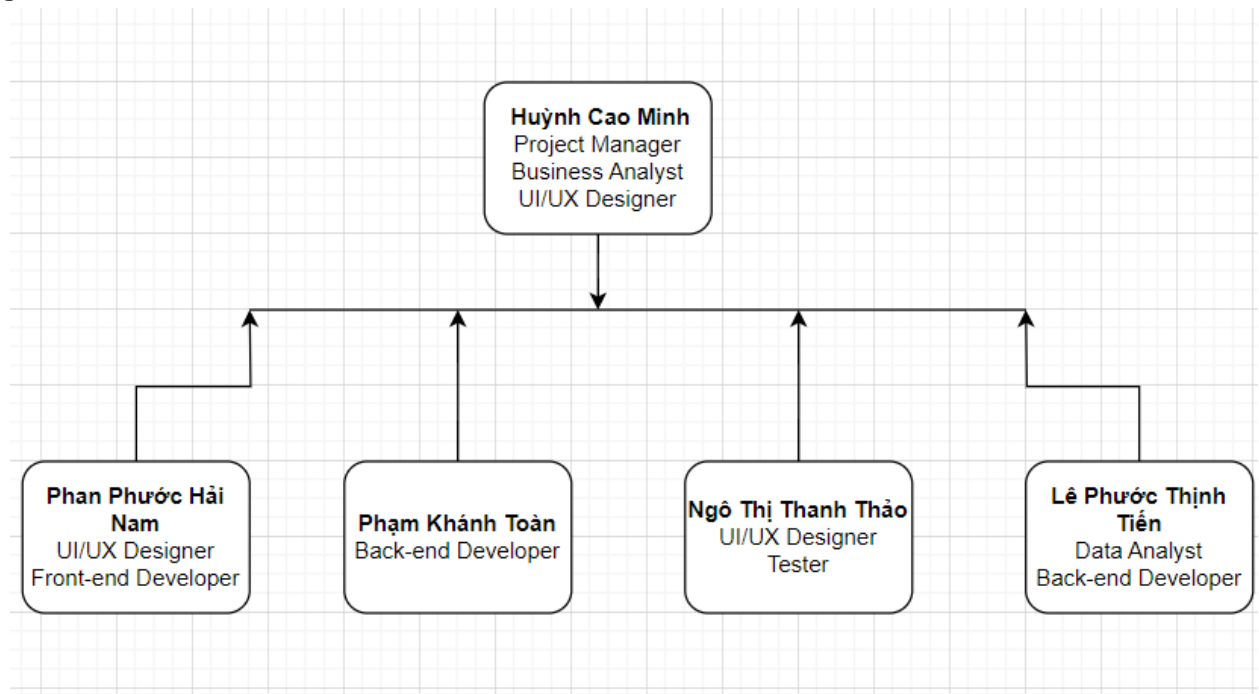
- The primary deliverable is the completed the project, featuring all the described functionalities.
- Providing user manuals and online help resources to assist users in navigating and utilizing the app effectively.

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- Implementing robust data security measures to protect sensitive information and ensure regulatory compliance.
- Secure payment processing and checkout functionality
- User review and rating system for book feedback

3. Project Organization

3.1 Organizational Structure



3.2 Roles and Responsibilities

Person	Role
Huynh Cao Minh Project Manager Business Analyst UI/UX Designer	<ul style="list-style-type: none"> -Assist with project documentation, file management, reports and information retrieval. -Create design documentation and guidelines for the project. -Responsible for project planning, scheduling, and overall coordination. -Collaborate with UI/UX designers to create the visual design and layout of the web application.
Phan Phuoc Hai Nam UI/UX Designer Front-end Developer	<ul style="list-style-type: none"> -Collaborate with UI/UX designers to create the visual design and layout of the web application. -Work with UI/UX designers to ensure a user-friendly and intuitive user experience. - Focus on developing the front-end of the web application.

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Pham Khanh Toan Back-end Developer	<ul style="list-style-type: none"> - Responsible for building the back-end infrastructure of the web application, including databases and server functionality. - Manage the database system, ensuring data is organized and secure. - Develop APIs for data communication between the front-end and back-end. - Implement security measures to protect user data and the application.
Ngo Thi Thanh Thao UI/UX Designer Tester	<ul style="list-style-type: none"> - Responsible for designing the user interface and ensuring a pleasant user experience. - Test the user interface to ensure it aligns with the design and report any usability issues - Work with front-end developers to ensure the front-end and data analytics align with the design and user experience. - Facilitate communication among team members and stakeholders.
Le Phuoc Thinh Tien Data Analyst Back-end Developer	<ul style="list-style-type: none"> - Work with Pham Khanh Toan on the back-end development of the web application - Analyze user data and behavior to provide insights for improving the application - Assist in integrating data analytics tools with the web application. - Optimize the back-end for speed and scalability.

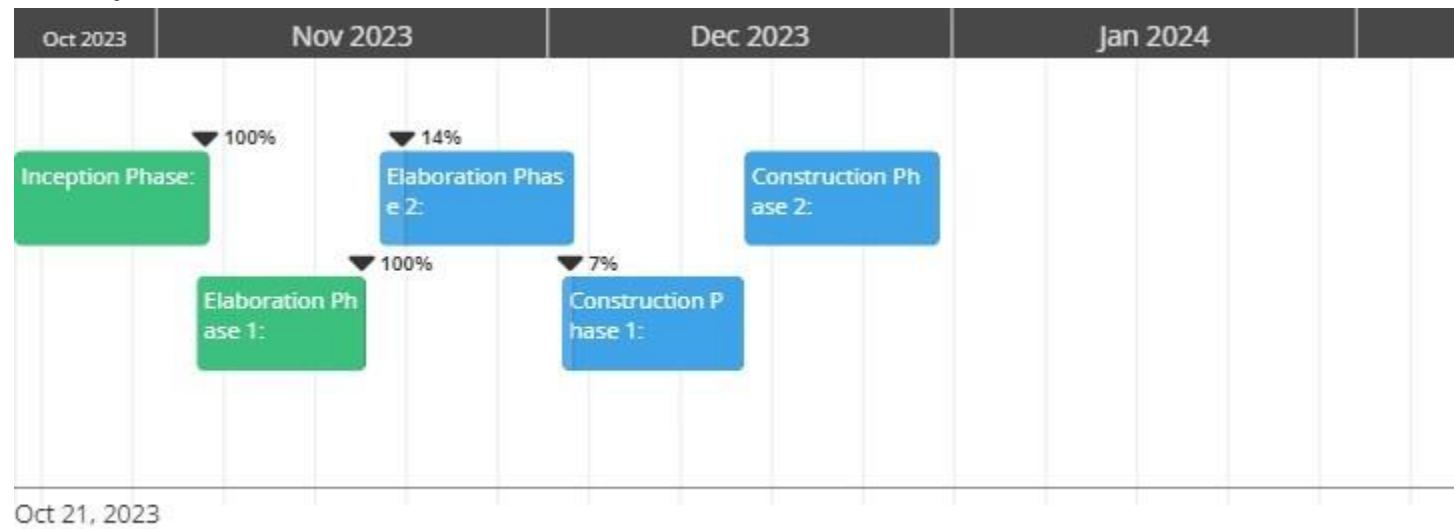
4. Management Process

4.1 Project Estimates

- Cost:
 - No cost in money
 - About 2 hours of work everyday 6 days a week
 - 6 sprints (from 1 to 6 with 1 sprint every 2 weeks)
- Schedule: from 5/10/2023 to 27/12/2023
- We will re-estimate every time we hit a milestone

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4.2 Project Plan



4.2.1 Phase Plan

Phase	No. of iteration	Start	End
Inception phase	1	Week 1	Week 3
Elaboration phase	2, 3	Week 3	Week 8
Construction phase	4, 5	Week 4	Week 11

Phase	Sprint	Task	Start	End
Inception	1		21/10/2023	04/11/2023
		Choose roles	21/10/2023	22/10/2023
		Create an environment to store project information	23/10/2023	24/10/2023
		Vision Document	23/10/2023	27/10/2023
		Risk management	26/10/2023	30/10/2023
		Project plan	27/10/2023	31/10/2023
		Review Vision document and project plan	31/10/2023	02/11/2023
		Sprint Review and planning	03/11/2023	04/11/2023
Elaboration	2		04/11/2023	18/11/2023

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		Draw Use-case Diagram	04/11/2023	07/11/2023
		Write Use-case Specification	08/11/2023	10/11/2023
		Revise the Project Plan	09/11/2023	10/11/2023
		Revise the Vision document	11/11/2023	12/11/2023
		Design the draft version of the Architecture of the software	09/11/2023	12/11/2023
		Draw the draft of user interface	11/11/2023	13/11/2023
		Sprint Review and planning	14/11/2023	16/11/2023
Elaboration	3		18/11/2023	02/12/2023
		Finalize the Architecture of the software	18/11/2023	20/11/2023
		Draw the class diagram	21/11/2023	24/11/2023
		Design the database	22/11/2023	25/11/2023
		Implement prototypes for user interface	25/11/2023	27/11/2023
		Implement the login-register feature	25/11/2023	27/11/2023
		Implement the booking feature	26/11/2023	29/11/2023
		Implement the management feature	26/11/2023	29/11/2023
		Sprint Review and planning	30/11/2023	02/11/2023
Construction	4		02/12/2023	16/12/2023
		Continue to implement core features (booking, management)	02/12/2023	08/12/2023
		Implement the user interface for core features	02/12/2023	08/12/2023
		Design test case	09/12/2023	10/12/2023
		Test system for core release	11/12/2023	13/12/2023
		Sprint Review and planning	14/12/2023	15/12/2023
Construction	5		16/12/2023	30/12/2023

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		Implement some other features (feedback, financial control: payment, salary management...)	16/12/2023	24/12/2023
		Test system for final release	25/12/2023	27/12/2023
		Sprint Review and planning	28/12/2023	30/12/2023

4.2.2 Iteration Objectives

Phase	Iteration	Description	Objective
Inception phase	Project Initiation	In this initial iteration, the project is formally initiated. The project team is assembled, and the project's scope, objectives, and constraints are defined. Key stakeholders are identified, and the project's feasibility is assessed.	To lay the foundation for the project, ensuring that all stakeholders understand the project's purpose, scope, and constraints. The primary objective is to secure project approval and funding.
Elaboration phase	Development architectural prototype	Builds upon the Inception Phase by diving deeper into the project's design and architecture. It involves detailed requirements gathering, architectural design, and risk assessment.	Architectural prototype
Construction phase	Develop Nice H&R Official release	<ul style="list-style-type: none"> - Implement Nice H&R version 1.0 - Fix defects and bugs from Nice H&R 1.0 - Release the final version of Nice H&R 	Nice H&R website release and presentation about Nice H&R final version

4.2.3 Releases

Version 1.0:

Description: The first release of Nice H&R introduces the core features for reservation management, staff scheduling, and menu updates. It offers cross-platform accessibility, user-friendly design, and robust data security. Users can efficiently manage reservations, optimize staff schedules, and update menus in real time. This version aims to improve operational efficiency and customer satisfaction for hotels and restaurants.

Key features:

- Reservation Management
- Staff Scheduling
- Menu Management
- Cross-Platform Accessibility
- User-Friendly Interface

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- Data Security

Version 2.0:

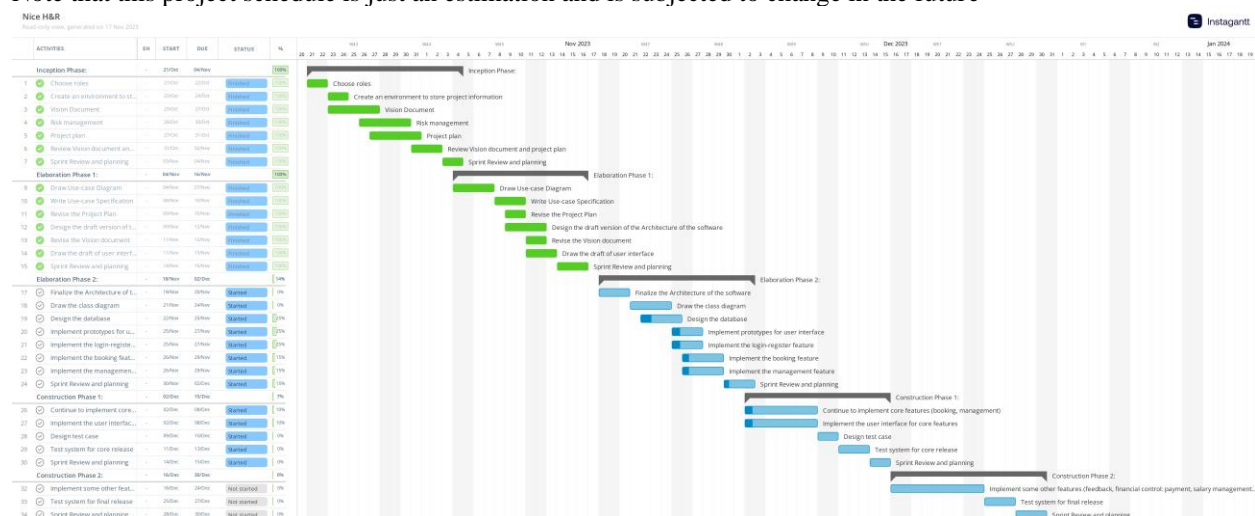
Description: The second release of the app enhances its capabilities with additional features. It introduces financial control tools for expense tracking and revenue monitoring. Guests can provide feedback for service improvement, and table assignments are optimized for an improved dining experience. This version aims to provide a comprehensive restaurant management solution that not only improves operations but also enhances financial control and guest satisfaction.

Key features:

- Financial Control
- Guest Feedback System
- Table Assignment Optimization

4.2.4 Project Schedule

Note that this project schedule is just an estimation and is subjected to change in the future



4.2.5 Project Resourcing

Member	Special skills
Huynh Cao Minh	Managing project, UI/UX designer, document writing
Ngo Thi Thanh Thao	Designing, testing product, UI/UX designer
Pham Khanh Toan	Back-end developing
Phan Phuoc Hai Nam	Designing, front-end developing
Le Phuoc Thinh Tien	Data handling, database managing

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4.3 Project Monitoring and Control

4.3.1 Requirements Management

The requirements for this system are captured in the Vision document. Requested changes to requirements are captured in Change Requests, and are approved as part of the Configuration Management process.

4.3.2 Reporting and Measurement

- Weekly reports are located on Google Drive
- Jira is the place to assign tasks to each member
- Discord, Messenger and Slack are where the member discuss as well as make important announcement regarding the project

4.3.3 Risk Management

Risks will be identified in Inception Phase using the steps identified in the RUP for Small Projects activity “Identify and Assess Risks”. Project risk is evaluated at least once per iteration and documented in this table. The risks of the greatest magnitude are listed first in the table.

Risk Ranking (High, Medium, Low)	Risk Description and Impact	Mitigation Strategy and/or Contingency Plan
High	Risk: Data Security Breach Impact: A data security breach could lead to unauthorized access to sensitive customer and restaurant data, resulting in reputation damage and potential legal consequences.	- Implement robust data security measures, including encryption and access controls. Regular security audits and updates. - In the event of a breach, have a data breach response plan in place, including notifying affected parties and complying with legal requirements.
High	Risk: Delay in Development Impact: Delays in development may impact the app's time-to-market, causing potential loss of market opportunities and competitive advantage.	-Develop a well-defined project plan with clear milestones and regular progress tracking. -Allocate additional resources or adjust project timelines to minimize the impact of potential delays.
Medium	Risk: Inadequate User Adoption Impact: If users do not adopt the app as expected, it could lead to underutilization and a lack of expected benefits.	-Invest in user training and provide user support resources. -Continuously gather user feedback and make updates to improve website usability and meet user needs.
Medium	Risk: Regulatory Changes Impact: Changes in data protection or industry regulations may require app adjustments and could impact the compliance of the app.	-Stay informed about regulatory changes and adjust the website accordingly. -Prepare to swiftly adapt the app to new regulatory requirements
High	Lack of experience in group	Mitigate. Do personal research and learn essential

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	work and committing to a new software development process. Impact: Serious.	skills. Hold more discussions to attain clear knowledge of each member's abilities, the development process, and the project as a whole.
High	Members are late or unable to join meetings due to personal schedules. Impact: Serious.	Avoid. Arrange for more flexible schedules to accommodate all team members.

4.3.4 Configuration Management

Appropriate tools will be selected which provide a database of Change Requests and a controlled versioned repository of project artifacts.

All source code, test scripts, and data files are included in baselines. Documentation related to the source code is also included in the baseline, such as design documentation. All customer deliverable artifacts are included in the final baseline of the iteration, including executables.