# Group 03

**Project Assignment 01**
**Software Development Plan**
**Version <1.01>**

**Revision History**

| Date | Version | Description | Author |
|---|---|---|---|
| <06/05/22> | <1.0> | The initial project plan of website buying | All members of the project team |
| <19/06/22> | <1.01> | Edit Project Schedule | All members of the project team |
| | | | |
| | | | |

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| &lt;document identifier&gt; | |

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**Software Development Plan**

## 1. Introduction

The introduction of the **Software Development Plan** provides an overview of the entire document.

## 2. Project Overview

### 2.1. Project Purpose, Scope, and Objectives

- If this project can be done it will help people who want to find many big deals of electronic device such as: ipad, tablet, smartphone,... and it makes customer can approach new products faster and easier beside that it will help the economic growth and satisfying customer needs
- This web shopping has main functions are:

+With customer:

- Chat with admin

- Add to cart

- Finding product with sort filter

- Running sale & advertisement for shop

- Comment, react,rate for products

- Online paying ,...

+With store owner:

- Manage the order

- Storage list of information of customer

- Manage the product

- Manage revenue statements ,...

### 2.2. Assumptions and Constraints

- Project has a fixed schedule of 12 weeks

- zero-budget project.

- Project has 5 people, there will be no more people added during the project
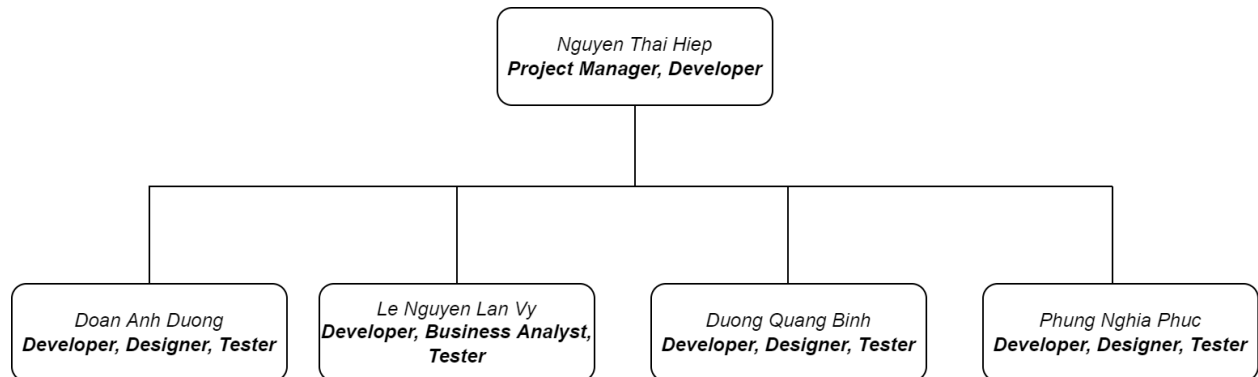
### 2.3. Project Deliverables

Deliverables for each project phase are identified in the Development Case. Deliverables are delivered towards the end of the iteration, as specified in section 4.2.4 Project Schedule.

### 3.Project Organization

### 3.1.Organizational Structure

```
                    ┌─────────────────────────────┐
                    │      Nguyen Thai Hiep        │
                    │  Project Manager, Developer  │
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                                  │
        ┌──────────────┬──────────┴──────────┬──────────────┐
┌──────────────┐ ┌──────────────────┐ ┌──────────────┐ ┌──────────────┐
│ Doan Anh Duong│ │ Le Nguyen Lan Vy │ │Duong Quang Binh│ │Phung Nghia Phuc│
│  Developer,   │ │ Developer,       │ │  Developer,   │ │  Developer,   │
│  Designer,    │ │ Business Analyst,│ │  Designer,    │ │  Designer,    │
│  Tester       │ │ Tester           │ │  Tester       │ │  Tester       │
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```

### 3.2. External Interfaces

- The Project Manager will provide Status Assessment, as scheduled in this plan, to the project team.
- The project team will also interact with each other to solicit inputs and review of relevant artifacts.

### 3.2.1.User Interfaces

- The project team describe the logical characteristics of the software product and the users about GUI standards, screen layout constraints, buttons, functions will appear on every screen, keyboard shortcuts, error message display.
- Define the software components for which a user interface is needed.

### 3.2.2.Hardware and software interfaces

- Define the software connects between product and software components about databases, UI, UX, tools, library.
- Determine the data items coming into the system and going out and describe the purpose of each.

### 3.2.3.Communications interfaces

- The project team will work with any communications functions required by this product consisting of gmail, website, …

### 3.2.4.Contact interface

- The primary contact for this project will be Nguyen Thai Hiep, Project Manager

### 3.3.Roles and Responsibilities

| Person | Role |
|---|---|
| Nguyen Thai Hiep Project Manager, Developer | Responsible for planning, monitoring and controlling, closing out projects, judging the members of the project, following and reporting to ensure everyone successfully completes project tasks. Coding, designing website interface. |

| | |
|---|---|
| Doan Anh Duong<br><br>Developer, Designer, Tester | Responsible for designing testing scenarios for usability testing, coding, designing website interface. |
| Duong Quang Binh<br><br>Developer, Designer, Tester | Responsible for designing testing scenarios for usability testing, coding, designing website interface. |
| Phung Nghia Phuc<br><br>Developer, Designer, Tester | Responsible for designing testing scenarios for usability testing, coding, designing website interface. |
| Le Nguyen Lan Vy<br><br>Developer, Business Analyst, Tester | Responsible for designing testing scenarios for usability testing, coding, bridging the gap between IT and the business using data analytics to assess processes, determine requirements and deliver data-driven recommendations and reports to executives and stakeholders. |

## 4. Management Process

### 4.1. Project Estimates

Project has 12 weeks (3 months) to complete. So dividing the total time of the project into 6 sprints, each sprint will have 2 weeks.

Member of the team: including 5 people.

- Each person has to work for the project 4 hours/day at least.
- Each person works 5 days/week.

=> Total estimated time for the team: $5*4*5*12= 1200$ hours. Each person has to work for 240 hours.

### 4.2. Project Plan

### 4.2.1. Phase and Iteration Plan

There are 3 phases corresponding to 6 sprints (6PAs):
- Inception: Doing and Completing PA0 and PA1. Know the business for the website and determine the initial state. It takes 2 weeks (a PA/week). ( 1sprint).
- Collaboration:
    + Remind and give tasks.
    + Design the system, database structure.
    + Coding.
- Construction: Takes 2 weeks at the end of our project.
    + The main tasks: release the final build and fix all bugs.

- Sprint 1:

| ID | Name | Start Date | End Date | Duration |
|---|---|---|---|---|
| 1 | Learn about PA01 | May 31, 2022 | Jun 03, 2022 | 4 days |
| 2 | Doing Project Plan | May 31, 2022 | Jun 05, 2022 | 6 days |
| 3 | Doing Vision Document | May 31, 2022 | Jun 05, 2022 | 6 days |
| 4 | Learn about JS | Jun 03, 2022 | Jun 06, 2022 | 4 days |
| 5 | Learn about HTML + CSS | Jun 03, 2022 | Jun 06, 2022 | 4 days |
| 6 | Doing Weekly Report | Jun 04, 2022 | Jun 05, 2022 | 2 days |
| 7 | Update PA0 | Jun 11, 2022 | Jun 11, 2022 | 1 day |

- Sprint 2:

| ID | Name | Start Date | End Date | Duration |
|---|---|---|---|---|
| 1 | Learn about Use-case Diagram | Jun 13, 2022 | Jun 14, 2022 | 2 days |
| 2 | Draw Use - case Diagram | Jun 16, 2022 | Jun 17, 2022 | 2 days |
| 3 | Draw Use - case specification | Jun 18, 2022 | Jun 19, 2022 | 2 days |
| 4 | Document about use - case specification | Jun 19, 2022 | Jun 21, 2022 | 3 days |
| 5 | Learn about React JS | Jun 13, 2022 | Jun 16, 2022 | 4 days |
| 8 | Doing weekly Report | Jun 17, 2022 | Jun 19, 2022 | 3 days |
| 9 | Update PA1 - Vision Document | Jun 13, 2022 | Jun 13, 2022 | 1 day |
| 10 | Update PA1 - Project Plan | Jun 14, 2022 | Jun 14, 2022 | 1 day |

- Sprint 3:

| ID | Name | Start Date | End Date | Duration |
|---|---|---|---|---|
| 1 | Learn about Diagram class | Jun 27, 2022 | Jun 30, 2022 | 4 days |
| 2 | Design Diagram class | Jun 29, 2022 | Jun 30, 2022 | 2 days |
| 3 | Complete Software Architecture Document | Jul 01, 2022 | Jul 03, 2022 | 3 days |
| 4 | Design Database | Jun 27, 2022 | Jun 30, 2022 | 4 days |
| 5 | Coding database | Jun 29, 2022 | Jul 03, 2022 | 5 days |
| 6 | Coding UI design | Jun 28, 2022 | Jul 03, 2022 | 6 days |
| 7 | Doing Weekly Report | Jul 02, 2022 | Jul 03, 2022 | 2 days |
| 8 | Update PA2 - Use case model | Jun 27, 2022 | Jun 29, 2022 | 3 days |

- Sprint 4:

| ID | Name | Start Date | End Date | Duration |
|---|---|---|---|---|
| 1 | Learn about how to deploy project to hosting | Jul 11, 2022 | Jul 12, 2022 | 2 days |
| 2 | Coding the functions in project | Jul 11, 2022 | Jul 17, 2022 | 7 days |
| 3 | Publish UI | Jul 11, 2022 | Jul 12, 2022 | 2 days |
| 4 | Weekly Report | Jul 16, 2022 | Jul 17, 2022 | 2 days |
| 5 | Update PA3 | Jul 11, 2022 | Jul 13, 2022 | 3 days |

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- Sprint 5:

| | ID | Name | Start Date | End Date | Duration | Jul 17, 2022 | Jul 24, 2022 | Jul 31, 2022 |
|---|---|---|---|---|---|---|---|---|
| | 1 | Learn about test case | Jul 25, 2022 | Jul 28, 2022 | 4 days | | ▬▬ | |
| | 2 | Testing the team project | Jul 28, 2022 | Jul 30, 2022 | 3 days | | ▬▬ | |
| | 3 | Complete the functions | Jul 25, 2022 | Jul 29, 2022 | 5 days | | ▬▬ | |
| | 4 | Report | Jul 30, 2022 | Jul 31, 2022 | 2 days | | ▬ | |
| | 5 | Update PA4 | Jul 25, 2022 | Jul 27, 2022 | 3 days | | ▬ | |
| | 6 | Reviewing all task had doing | Jul 30, 2022 | Jul 31, 2022 | 2 days | | ▬ | |

**4.2.2.Releases**

Based on the scheduling of the project, we decide to release 3 builds:
- First build: a brief demo to show the background of the project. The estimated time is within sprint 2. This build will be sent to the customer. The primary purpose for this build is to get the corresponding of the customer:
    + Does this build satisfy all the requirements of the customer?
    + What like and unlike things, and which part must be altered or modified?
    + What things needed for the next product.
    + Estimated Publishment time (assignment): 06/19/2022. (June 19th, 2022).
- Second build: Modify the software equivalent to the corresponding customer. Each part of the product must be completed partially. Build some test cases for this second build. (Simulating all the main functions of the website).
    + Publishment: within sprint 3, assignment: 07/03/2022.
- Demo website: use test cases to guarantee all the function is working stably.
    + Processing on sprint 4.
    + Change the inception if needed.
- Third build: the fixed-bug version after demo. Executed on sprint 5.
- Final build (Release officially): The final product will fully function.
    + End of the project: 08/11/2022.

**4.2.3.Project Schedule**

The particular task for each sprint and responsibilities of each member in the team:

- Sprint 1:
    - Doing Project Plan Document:
        + Introduction and Overview: Le Nguyen Lan Vy.
        + Project Organization: Le Nguyen Lan Vy.
        + Manage Process:
            + 4.1, 4.2.2, 4.2.3, 4.3.4: Doan Anh Duong.
            + 4.2.1: Duong Quang Binh, Phung Nghia Phuc.
            + 4.3.3: Nguyen Thai Hiep.
    - Doing Vision document:
        + Introduction and Position: Doan Anh Duong, Le Nguyen Lan Vy.
        + Stakeholder and User Descriptions: Duong Quang Binh, Phung Nghia Phuc.
        + Product Features and Non-Functional Requirement: Nguyen Thai Hiep
    - Weekly report: Nguyen Thai Hiep.
    - Update PA 0: Phung Nghia Phuc.
- Sprint 2:
    - Use-case model: all members: Phung Nghia Phuc, Nguyen Thai Hiep, Le Nguyen Lan Vy, Duong Quang Binh, Doan Anh Duong.
    - Use-case Specification:

        Responsible for those cases below: Doan Anh Duong.

        - Use case: Show information of account,
        - Use case: Editing Account.

- Use case: Deleting Account for User and Manager.
- Use case: Sold out or when a product is about to be out of stock.

Responsible for those cases below: Phung Nghia Phuc.

- Use case: Edit Products.
- Use case: delete product.
- Use case: Add product (if staff has admin provide permissions).
- Use case: Edit services (voucher, super sales, flashsales).
- Use case: Call customer support.

Responsible for those cases below: Le Nguyen Lan Vy.

- Use case: Login account..
- Use case: Sign up account.
- Use case: Change password.
- Use case: Chat with seller.
- Use case: Chat with customer.

Responsible for those cases below: Nguyen Thai Hiep.

- Use case: Send notices to customer.
- Use case: Send notices to user.
- Use case: Adding to cart.
- Use case: Viewing orders
- Use case: Checkout Items.

Responsible for those cases below: Duong Quanh Binh.

- Use case: Show products Statistic.
- Use case: Show the sales statistics..
- Weekly report: Nguyen Thai Hiep..
- Update PA01:
  - Doing Project Plan Document:
  + Introduction and Overview: Le Nguyen Lan Vy.
  + Project Organization: Le Nguyen Lan Vy.
  + Manage Process:
    + 4.1, 4.2.2, 4.2.3, 4.3.4: Doan Anh Duong.
    + 4.2.1: Duong Quang Binh, Phung Nghia Phuc.
    + 4.3.3: Nguyen Thai Hiep.
  - Doing Vision document:
    + Introduction and Position: Doan Anh Duong, Le Nguyen Lan Vy.
    + Stakeholder and User Descriptions: Duong Quang Binh, Phung Nghia Phuc.
    + Non-Functional Requirement: Nguyen Thai Hiep.
    + Product Features: each use-cases if which are features, will be added to by the person be responsible for those use-cases.
- Sprint 3 (expected):
  - Use-case specification Update: Nguyen Thai Hiep.
  - Software Architecture: Nguyen Thai Hiep, Phung Nghia Phuc.
  - Class Diagram: Doan Anh Duong, Duong Quang Binh, Le Nguyen Lan Vy.
  - Coding UI, Database: Whose role is developer
  - Weekly report: Phung Nghia Phuc.
- Sprint 4 (expected):
  - Software Architecture Document: Nguyen Thai Hiep.
  - UI Prototype: all members.
  - Coding the functions remaining to the project: Whose role is developer
  - Weekly report: Phung Nghia Phuc.

- Sprint 5 (expected):
    - Implementation: whose role is developer.
    - Build test case and test plan: Tester.
    - Weekly report: Phung Nghia Phuc.

### 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 Request, and are approved as part of the Configuration Management process

#### 4.3.2. Reporting

None.

#### 4.3.3. Risk Management

Risk will be identified in Inception Phase using the steps identified in the RUP for Projects activity "Identify and Asscess 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 below

| Risk Ranking (High, Medium, Low) | Risk Description and/or Impact | Mitigation Strategy and/or Contingency Plan |
|---|---|---|
| Have not caught up with technology | Product may not meet all requirements | Spend time studying more external courses, often ask the instructors |
| Someone quit the project | There will be a shortage of manpower | Hire someone else |
| There are members who are late for the deadline | The output of the product will be late | Deduct points and remind each member of the team if the deadline is late |
| Misuse of technology | Products are greatly affected | Change and apply other technology promptly |
| There are features that are too difficult | None | Group meeting and discuss together to complete that feature |
| Not enough expenses | The product will be delayed | Wait and ask for a delay |
| Change request from customer | The product will be subject to change | Edit or change the features to suit the needs of customers |

In summary, to limit all possible risks we have done the following:

- Use Agile Techniques to Deal with Technical Debt
- Focus on Testing and Maintenance
- Choose the right technology

#### 4.3.4. Configuration Management

Our project has 2 parts: source code and reporting. So we use 2 tools:

- Google drive: To store the reporting. Simultaneously, saving the overview and the plan of our team for each sprint.

- Github: To save the source code. When designing and coding the product at the sprint 3, each member will work and modify directly on this platform.