Version 1.0

Revision History

|  |  |  |  |
| --- | --- | --- | --- |
| **Date** | **Version** | **Description** | **Author** |
| 09/Dec/24> | 1.0 | Init document and fill project information | Huy Nguyen |

Table of Contents

1. Introduction 5

1.1 Purpose 5

1.2 Scope 5

1.3 Definitions, Acronyms, and Abbreviations 5

1.3.1 Defintions 5

1.3.2 Acronyms 5

1.3.3 Abbreviations 5

1.4 References 5

1.5 Overview 5

2. Project Overview 5

2.1 Project Purpose, Scope, and Objectives 5

2.2 Assumptions and Constraints 6

2.3 Project Deliverables 6

2.4 Evolution of the Software Development Plan 6

3. Project Organization 7

3.1 Organizational Structure 7

3.2 External Interfaces 7

3.3 Roles and Responsibilities 7

4. Management Process 7

4.1 Project Estimates 7

4.2 Project Plan 7

4.2.1 Phase Plan 7

4.2.2 Iteration Objectives 7

4.2.3 Releases 7

4.2.4 Project Schedule 7

4.2.5 Project Resourcing 7

4.2.6 Budget 8

4.3 Iteration Plans 8

4.4 Project Monitoring and Control 8

4.4.1 Requirements Management Plan 8

4.4.2 Schedule Control Plan 8

4.4.3 Budget Control Plan 8

4.4.4 Quality Control Plan 8

4.4.5 Reporting Plan 8

4.4.6 Measurement Plan 8

4.5 Risk Management Plan 8

4.6 Close-out Plan 8

5. Technical Process Plans 8

5.1 Development Case 8

5.2 Methods, Tools, and Techniques 9

5.3 Infrastructure Plan 9

5.4 Product Acceptance Plan 9

6. Supporting Process Plans 9

6.1 Configuration Management Plan 9

6.2 Evaluation Plan 9

6.3 Documentation Plan 9

6.4 Quality Assurance Plan 9

6.5 Problem Resolution Plan 9

6.6 Subcontractor Management Plan 9

6.7 Process Improvement Plan 9

7. Additional Plans 9

8. Annexes 10

9. Index 10

# 

# Introduction

## Purpose

This document provide an overview of project information.

## Scope

This project only present the plan for software development project what is development the e-commerce system for selling baby toys and teddy-bear.

## Definitions, Acronyms, and Abbreviations

### Defintions

None

### Acronyms

|  |  |  |
| --- | --- | --- |
| **Acronyms** | **Meaning** | **Description** |
| SD | Software Development |  |
| PLN | Plan |  |
| TSK | Task |  |

### Abbreviations

None

## References

|  |  |  |
| --- | --- | --- |
| **ID** | **Document** | **References** |
| doc-01-sdpln | Software Development Plan |  |
| doc-02-vis | Vision Document |  |
| doc-03-srs | Software Requirement Specification |  |
| doc-04-ucspec | Use-case Specification Document |  |
| doc-05-sad | Software Architecture Document |  |
| doc-06-tstpln | Test Plan Document |  |
| doc-07-tsteval | Test Evaluation Summary |  |

## Overview

Document define the information of project, software process which is used for software development process, definition of done with project goal.

# Project Overview

## Project Purpose, Scope, and Objectives

The purpose of this project will develop the e-commerce system for selling toys and teddy-bear for children.

The scope of project is

* Develop the website for customer to be able search detail information of item which the want to buy for their children.
* Develop the admin dashboard for the employees of company to control orders, to manage production information.
* The system support to integrate with payment gateway services for the customer be able check-out the order online.

The objective of project is

* Deliver the system for bussiness requirement.
* Deliver the document of the system.
* Deploy the system to server and public the system to production.

## Assumptions and Constraints

The project will be developed with 03 month with the budget 100.000 USD.

The staff which join to this project have 2 team

* The bussiness team of client who will present the bussiness requirements.
* The development team have responsibility to analyst requirement, design system, implementation, testing and deploy the system to production.

## Project Deliverables

|  |  |  |
| --- | --- | --- |
| **#** | **Delivery items** | **Delivery dates** |
| 1 | SRS document | week-01 |
| 2 | System Design document | week-02 |
| 3 | Release website for cusomer | week-03 to week-08 |
| 4 | Release admin dashboard | week-09 to week-10 |
| 5 | Deployment system to Production Server | week-11 |
| 6 | Public system and guide the client’s employees to operate the system | week-12 |

## Evolution of the Software Development Plan

|  |  |
| --- | --- |
| **Version** | **Description** |
| 1.0 | The system is only developed for basic bussiness requirement. This is current version now. |
| 2.0 | The system supoort for online payment. |
| 3.0 | The system will integrate with Shiping Services. |
| 4.0 | The system can manage storage. |
| 5.0 | The system can support to process automation orders and integrate AI chatbot to support customers. |

# Project Organization

## Organizational Structure

|  |  |
| --- | --- |
| **Team name** | **Description** |
| Bussiness Team | The team of client who will present the bussiness requirement. |
| Development Team | The team will develop the system. |
| Project Manager | The person of Development team to manage and control progression of project. |

## External Interfaces

|  |  |  |  |
| --- | --- | --- | --- |
| **#** | **Extenal group name** | **External contact** | **Internal contact** |
| BUS | Bussiness team | Mr. Vinh – CEO [vinh@babyshop.com](mailto:vinh@babyshop.com) | Mr. Huy – PM [huy@sestud.io](mailto:huy@sestud.io) |
| PGS | Payment Gateway Services team | Mr. Bao – Technical Lead [bao@vnpay.vn](mailto:bao@vnpay.vn) | Mr. Huy – PM [huy@sestud.io](mailto:huy@sestud.io) |

## Roles and Responsibilities

|  |  |  |  |
| --- | --- | --- | --- |
| **#** | **Role** | **Name** | **Responsibility** |
| 1 | Project Manager | Huy Nguyen | Control progress and quality of project. |
| 2 | Bussiness Analyst | Huy Nguyen | Analyst requirement and contact with client |
| 3 | Developer | Vinh Le, Bao Nguyen | Desigen and development the system |
| 4 | Quality Control | Bao Nguyen | Control the quality of system |

# Management Process

## Project Estimates

We use Use-case Point Analysis method to analyst and estimate the project with parameters:

* Unadjusted Use Casse Weight (UUCW).
* Unadjusted Actor Weight (UAW).
* Technical Complexity Factor (TCF).
* Environmental Complexity Factor (ECF).

The fomular of Use-case Point Analysis is

UPC is presenting the Cost (hours) for estimate project.

So that, toal value of project will be presented by this fomula

with

When the bussiness requirement is changed, all takeholder will discuss and re-estimate project with use-case to be changed.

## Project Plan

### Phase Plan

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Phase** | **Task** | **Start Date** | **End Date** | **Duration (Days)** |
| **1** | **Planning and Requirements Analysis** | **Jan 6 2025** | **Jan 15 2025** | **10** |
| 1.1 | Identify business objectives | Jan 6 2025 | Jan 7 2025 | 2 |
| 1.2 | Gather requirements | Jan 8 2025 | Jan 10 2025 | 3 |
| 1.3 | Conduct market research | Jan 11 2025 | Jan 12 2025 | 2 |
| 1.4 | Define target audience | Jan 13 2025 | Jan 13 2025 | 1 |
| 1.5 | Create project plan and timeline | Jan 14 2025 | Jan 14 2025 | 1 |
| 1.6 | Allocate resources and budget | Jan 15 2025 | Jan 15 2025 | 1 |
| **2** | **System Design** | **Jan 16 2025** | **Jan 22 2025** | **7** |
| 2.1 | Define system architecture | Jan 16 2025 | Jan 17 2025 | 2 |
| 2.2 | Design database schema | Jan 18 2025 | Jan 18 2025 | 1 |
| 2.3 | Design wireframes and prototypes | Jan 19 2025 | Jan 20 2025 | 2 |
| 2.4 | Create user interface (UI) mockups | Jan 21 2025 | Jan 21 2025 | 1 |
| 2.5 | Obtain client approval | Jan 22 2025 | Jan 22 2025 | 1 |
| **3** | **Frontend Development** | **Jan 23 2025** | **Feb 11 2025** | **20** |
| 3.1 | Implement homepage | Jan 23 2025 | Jan 26 2025 | 4 |
| 3.2 | Develop product catalog pages | Jan 27 2025 | Jan 30 2025 | 4 |
| 3.3 | Implement product detail pages | Jan 31 2025 | Feb 3 2025 | 4 |
| 3.4 | Create user account pages | Feb 4 2025 | Feb 6 2025 | 3 |
| 3.5 | Implement shopping cart and checkout pages | Feb 7 2025 | Feb 10 2025 | 4 |
| 3.6 | Ensure responsive design | Feb 11 2025 | Feb 11 2025 | 1 |
| **4** | **Backend Development** | **Feb 12 2025** | **Mar 8 2025** | **25** |
| 4.1 | Set up server infrastructure | Feb 12 2025 | Feb 13 2025 | 2 |
| 4.2 | Develop APIs for frontend communication | Feb 14 2025 | Feb 18 2025 | 5 |
| 4.3 | Implement product management module | Feb 19 2025 | Feb 22 2025 | 4 |
| 4.4 | Develop user management module | Feb 23 2025 | Feb 26 2025 | 4 |
| 4.5 | Build order management system | Feb 27 2025 | Mar 3 2025 | 5 |
| 4.6 | Integrate payment gateway | Mar 4 2025 | Mar 5 2025 | 2 |
| 4.7 | Implement shipping and logistics tracking | Mar 6 2025 | Mar 8 2025 | 3 |
| **5** | **Integration** | **Mar 9 2025** | **Mar 18 2025** | **10** |
| **6** | **Testing** | **Mar 19 2025** | **Apr 2 2025** | **15** |
| **7** | **Deployment** | **Apr 3 2025** | **Apr 7 2025** | **5** |
| **8** | **Post-Deployment and Maintenance** | **Apr 8 2025** | **Apr 17 2025** | **10** |
| **9** | **Marketing and Launch** | **Apr 18 2025** | **Apr 24 2025** | **7** |

A graph with blue squares

Description automatically generated

### Iteration Objectives

Here are the **iteration objectives** for the e-commerce system development project for a baby shop. The project is divided into iterations, each focusing on a set of deliverables to incrementally develop the system.

**Iteration 1: Requirements Gathering and Initial Design**

**Objective:** Establish project scope, define system requirements, and create initial design concepts.

• Conduct stakeholder interviews to gather requirements.

• Identify key features (e.g., product catalog, shopping cart, payment gateway).

• Create wireframes and mockups for major user interfaces.

• Document the system architecture and database schema.

**Deliverables:**

• Project requirement document.

• Approved wireframes and mockups.

• Initial project timeline and milestones.

**Iteration 2: Core Frontend Development**

**Objective:** Build the primary frontend components for user interaction.

• Implement the homepage and navigation structure.

• Develop product catalog and product detail pages.

• Create user authentication pages (login, register).

• Ensure responsive design for mobile, tablet, and desktop devices.

**Deliverables:**

• Functional user interface for browsing and account creation.

• Responsive layout tested on multiple devices.

**Iteration 3: Backend Development and API Integration**

**Objective:** Set up the backend infrastructure and APIs for seamless frontend-backend communication.

• Develop user management and product management modules.

• Build APIs for product catalog, user accounts, and shopping cart.

• Integrate the database with backend services.

**Deliverables:**

• Functional backend system with basic API integration.

• Unit tests for core backend functionalities.

**Iteration 4: Advanced Features Development**

**Objective:** Implement advanced features, including checkout, payment, and shipping functionalities.

• Integrate payment gateway for secure transactions.

• Build order management and shipping tracking modules.

• Add support for promotional codes and discounts.

**Deliverables:**

• Fully functional shopping cart and checkout system.

• Tested payment and shipping workflows.

**Iteration 5: System Integration and Testing**

**Objective:** Ensure seamless interaction between all components through rigorous testing.

• Integrate frontend with backend services.

• Perform integration and system testing.

• Fix bugs and optimize system performance.

**Deliverables:**

• Fully integrated system ready for user acceptance testing (UAT).

• Test results with issue tracking reports.

**Iteration 6: Deployment and Initial Launch**

**Objective:** Deploy the system and prepare for the initial public launch.

• Set up the production environment and deploy the system.

• Conduct final testing in the live environment.

• Train staff or administrators on using the system.

**Deliverables:**

• Live e-commerce system.

• Documentation for system usage and support.

**Iteration 7: Post-Launch Optimization**

**Objective:** Address post-launch feedback and enhance system functionality.

• Monitor user activity and system performance.

• Fix any post-launch bugs or usability issues.

• Implement additional features based on feedback (e.g., wishlist, reviews).

**Deliverables:**

• Updated system with improved functionality.

• Post-launch performance report.

### Releases

Here’s a proposed **Release Plan** for the e-commerce system development project for a baby shop. The plan is divided into incremental releases to deliver functionality progressively while ensuring quality.

**Release 1: Minimum Viable Product (MVP)**

**Target Date:** End of Iteration 4 (e.g., March 8, 2025)

**Objective:** Deliver a functional e-commerce system with core features to enable early user adoption and feedback.

**Key Features:**

• Homepage with basic navigation.

• Product catalog and detail pages.

• User authentication (login, register).

• Shopping cart and checkout functionality.

• Payment gateway integration (one payment method).

• Basic order management system.

**Testing:**

• Unit and integration testing for all core modules.

**Deployment Scope:**

• Limited user base or internal team for testing and feedback.

**Release 2: Feature-Complete Version**

**Target Date:** End of Iteration 5 (e.g., March 18, 2025)

**Objective:** Expand the system with advanced features and refine the core functionalities based on feedback from Release 1.

**Key Features:**

• Enhanced user profile (order history, saved addresses).

• Shipping and logistics tracking integration.

• Support for promotional codes and discounts.

• Multi-device responsive design refinement.

• Bug fixes and performance optimizations from MVP feedback.

**Testing:**

• System and user acceptance testing (UAT).

**Deployment Scope:**

• Broader user base with a soft launch to gauge system performance.

**Release 3: Public Launch**

**Target Date:** End of Iteration 6 (e.g., April 7, 2025)

**Objective:** Deploy the system to the public with a polished user experience and robust backend performance.

**Key Features:**

• Fully integrated system with backend and frontend modules.

• Multi-payment gateway support (if applicable).

• Search functionality with filters and sorting options.

• Initial marketing and promotional campaigns live.

**Testing:**

• Final testing in the production environment.

• Load testing to ensure scalability.

**Deployment Scope:**

• Full public release with marketing campaigns targeting the baby shop’s audience.

**Release 4: Post-Launch Update**

**Target Date:** End of Iteration 7 (e.g., April 24, 2025)

**Objective:** Address post-launch issues and enhance the system based on real-world feedback.

**Key Features:**

• Wishlist functionality.

• Customer reviews and ratings system.

• Additional features requested by users.

• Bug fixes from live environment issues.

• Backend performance optimizations.

**Testing:**

• Regression testing for all updates.

**Deployment Scope:**

• Deployed incrementally to avoid downtime.

**Release 5: Continuous Updates**

**Target Date:** Ongoing after April 24, 2025

**Objective:** Maintain and evolve the system with new features and updates to remain competitive.

**Key Features:**

• Monthly updates for performance and security.

• Seasonal marketing campaigns and new product collections.

• Analytics dashboard for business insights.

**Testing:**

• Regular QA and performance testing.

**Deployment Scope:**

• Incremental updates in the production environment.

This release plan ensures the system is delivered incrementally, allowing for early feedback, quality assurance, and continuous improvement.

### Project Schedule

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Phase/Iteration** | **Tasks/Deliverables** | **Start Date** | **End Date** | **Duration (Days)** | **Release** |
| 1 | Planning and Requirements Analysis | Jan 6 2025 | Jan 15 2025 | 10 | - |
| 1.1 | Identify business objectives | Jan 6 2025 | Jan 7 2025 | 2 |  |
| 1.2 | Gather requirements | Jan 8 2025 | Jan 10 2025 | 3 |  |
| 1.3 | Conduct market research | Jan 11 2025 | Jan 12 2025 | 2 |  |
| 1.4 | Define target audience | Jan 13 2025 | Jan 13 2025 | 1 |  |
| 1.5 | Create project plan and timeline | Jan 14 2025 | Jan 14 2025 | 1 |  |
| 1.6 | Allocate resources and budget | Jan 15 2025 | Jan 15 2025 | 1 |  |
| 2 | System Design Define architecture; design wireframes and mockups | Jan 16 2025 | Jan 22 2025 | 7 |  |
| 3 | Frontend Development Build core UI components | Jan 23 2025 | Feb 11 2025 | 20 | Release 1 (MVP) |
| 4 | Backend Development Develop backend and integrate APIs | Feb 12 2025 | Mar 8 2025 | 25 | Release 1 (MVP) |
| 5 | Integration and Testing Combine components and conduct testing | Mar 9 2025 | Mar 18 2025 | 10 | Release 2 (Feature Complete) |
| 6 | System Optimization and Deployment Finalize the system and deploy it | Mar 19 2025 | Apr 7 2025 | 20 | Release 3 (Public Launch) |
| 7 | Post-Launch Maintenance Address feedback; optimize performance | Apr 8 2025 | Apr 24 2025 | 17 | Release 4 (Post-Launch) |
| 8 | Continuous Updates Rolling updates and feature enhancements | Ongoing | Ongoing | - | Release 5 (Continuous) |

**Milestones**

1. **Milestone 1 (Jan 15, 2025):** Completion of planning and requirements analysis.

2. **Milestone 2 (Jan 22, 2025):** Completion of system design.

3. **Milestone 3 (Feb 11, 2025):** Core frontend completed.

4. **Milestone 4 (Mar 8, 2025):** Backend completed and integrated with frontend.

5. **Milestone 5 (Mar 18, 2025):** System integration and testing completed (Release 2).

6. **Milestone 6 (Apr 7, 2025):** Public launch of the e-commerce system (Release 3).

7. **Milestone 7 (Apr 24, 2025):** Completion of post-launch updates (Release 4).

### Project Resourcing

#### Staffing Plan

##### Roles and Responsibilities

|  |  |
| --- | --- |
| **Role** | **Responsibilities** |
| Project Manager (PM) | Oversee project execution, manage timelines, budgets, and resources, coordinate teams. |
| Business Analyst (BA) | Gather requirements, create documentation, liaise between stakeholders and development teams. |
| UI/UX Designer | Design wireframes, prototypes, and UI elements, ensure responsive design and usability. |
| Frontend Developer | Build the user interface, ensure responsive design, and implement UI features. |
| Backend Developer | Develop backend logic, set up APIs, integrate databases, and handle server infrastructure. |
| Quality Assurance (QA) | Conduct testing (unit, integration, system), report and track bugs. |
| Marketing Specialist | Plan and execute marketing campaigns for product launch. |
| System Administrator | Manage deployment, monitor system performance, and ensure system stability post-launch. |

##### Resource Allocation by Phase

|  |  |  |  |
| --- | --- | --- | --- |
| **Phase** | **Roles Required** | **Team Members** | **Duration** |
| Planning and Requirements Analysis | Project Manager, Business Analyst | PM, BA | 10 days |
| System Design | Project Manager, UI/UX Designer | PM, UI/UX | 7 days |
| Frontend Development | Frontend Developer, UI/UX Designer | FE Dev, UI/UX | 20 days |
| Backend Development | Backend Developer | BE Dev | 25 days |
| Integration and Testing | Frontend Developer, Backend Developer, QA | FE Dev, BE Dev, QA | 10 days |
| Deployment | System Administrator, Project Manager | Sys Admin, PM | 5 days |
| Post-Launch and Maintenance | All Roles (PM, Devs, QA, Sys Admin, Marketing Specialist) | Entire Team | 17 days |
| Continuous Updates | Backend Developer, Frontend Developer, QA | FE Dev, BE Dev, QA | Ongoing |

##### Staffing Plan by Iteration

|  |  |  |  |
| --- | --- | --- | --- |
| **Iteration** | **Key Deliverables** | **Roles Required** | **Team Members** |
| Iteration 1 (Jan 6-15) | Requirements document, wireframes | Project Manager, Business Analyst, UI/UX | PM, BA, UI/UX |
| Iteration 2 (Jan 16-22) | Approved system design | Project Manager, UI/UX Designer | PM, UI/UX |
| Iteration 3 (Jan 23-Feb 11) | Core frontend components | Frontend Developer, UI/UX Designer | FE Dev, UI/UX |
| Iteration 4 (Feb 12-Mar 8) | Backend and API integration | Backend Developer | BE Dev |
| Iteration 5 (Mar 9-18) | Integrated and tested system | Frontend Developer, Backend Developer, QA | FE Dev, BE Dev, QA |
| Iteration 6 (Mar 19-Apr 7) | Deployed system | System Administrator, PM | Sys Admin, PM |
| Iteration 7 (Apr 8-24) | Post-launch updates, feedback | Entire Team | Full Team |

##### Staffing Timeline

|  |  |  |  |
| --- | --- | --- | --- |
| **Role** | **Start Date** | **End Date** | **Duration** |
| Project Manager | Jan 6, 2025 | Apr 24, 2025 | Full Project |
| Business Analyst | Jan 6, 2025 | Jan 15, 2025 | 10 days |
| UI/UX Designer | Jan 16, 2025 | Feb 11, 2025 | 25 days |
| Frontend Developer | Jan 23, 2025 | Mar 18, 2025 | 35 days |
| Backend Developer | Feb 12, 2025 | Mar 18, 2025 | 25 days |
| Quality Assurance (QA) | Mar 9, 2025 | Mar 18, 2025 | 10 days |
| System Administrator | Mar 19, 2025 | Apr 24, 2025 | 35 days |
| Marketing Specialist | Mar 19, 2025 | Apr 24, 2025 | 35 days |

#### Resource Acquisition Plan

none

#### Training Plan

none

### Budget

[Allocation of costs against the WBS and the Phase Plan.]

## Iteration Plans

[Each iteration plan will be enclosed in this section by reference.]

## Project Monitoring and Control

### Requirements Management Plan

[Enclosed by reference.]

### Schedule Control Plan

[Describe the approach taken to monitor progress against the planned schedule and how to take corrective action when required.]

### Budget Control Plan

[Describe the approach to be taken to monitor spending against the project budget and how to take corrective action when required.]

### Quality Control Plan

[Describe the timing and methods to be used to control the quality of the project deliverables and how to take corrective action when required.]

### Reporting Plan

[Describe internal and external reports to be generated, and the frequency and distribution of publication.]

### Measurement Plan

[Enclosed by reference.]

## Risk Management Plan

[Enclosed by reference.]

## Close-out Plan

[Describe the activities for the orderly completion of the project, including staff reassignment, archiving of project materials, post-mortem debriefings and reports, and so forth.]

# Technical Process Plans

## Development Case

[Enclosed by reference.]

## Methods, Tools, and Techniques

[List the documented project technical standards, etc., by reference:

* Business Modeling Guidelines
* User Interfaces Guidelines
* Use-Case-Modeling Guidelines
* Design Guidelines
* Programming Guidelines
* Test Guidelines
* Manual Style guide]

## Infrastructure Plan

[Enclosed by reference]

## Product Acceptance Plan

[Enclosed by reference]

# Supporting Process Plans

## Configuration Management Plan

[Enclosed by reference]

## Evaluation Plan

[As part of the **Software Development Plan,** this describes the project’s plans for product evaluation, and covers the techniques, criteria, metrics, and procedures used for evaluation— this will include walkthroughs, inspections, and reviews. Note that this is in addition to the Test Plan, which is not enclosed in the **Software Development Plan**.]

## Documentation Plan

[Enclosed by reference.]

## Quality Assurance Plan

[Enclosed by reference.]

## Problem Resolution Plan

[Enclosed by reference.]

## Subcontractor Management Plan

[Enclosed by reference.]

## Process Improvement Plan

[Enclosed by reference.]

# Additional Plans

[Additional plans if required by contract or regulations.]

# Annexes

[Additional material of use to the reader of the **Software Development Plan**.]

# Index