

**HANOI UNIVERSITY OF SCIENCE AND TECHNOLOGY**  
**SCHOOL OF INFORMATION AND COMMUNICATION TECHNOLOGY**



# **FEASIBILITY STUDY REPORT**

**Subject: Introduction to Software Engineering**

**Instructor : PhD. Trinh Thanh Trung**

**Team name : Helarica**

**Course ID : IT3180E**

**Hanoi, May 2023**

## **INTRODUCTION**

The HUST-PC project is a web-based eCommerce & Logistics platform that provides users with a wide range of technology products for both educational and entertainment purposes. Our team, consisting of 5 members specializing in Data Science and Artificial Intelligence, is currently working on a Feasibility Study Report for this project.

We would like to express our sincere gratitude to our instructor, PhD Trinh Thanh Trung, for his guidance and support throughout this project. Our goal is to create a user-friendly platform that offers a variety of high-quality and affordable technology products to meet the needs of our customers.

In this report, we will discuss the feasibility of the HUST-PC project, including the preliminary requirement analysis, target customers, technical aspects, risks analysis and project execution plan. We hope that this report will provide valuable insights and contribute to the success of HUST-PC project.

Sincerely,

## OUR TEAM

We are a group of students from Hanoi University of Science and Technology (HUST), majoring in Data Science & AI. As part of our curriculum, we were tasked with developing a software system named “HUST-PC”.

Our team named “**HELARICA**” is comprised of the following members:

No.	Full Name	Student ID	Role	Email
1	Phan Dinh Truong	20214937	Leader	truong.pd214937@sis.hust.edu.vn
2	Le Tuan Anh	20214874	Member	anh.lt214874@sis.hust.edu.vn
3	Vu Tuan Minh	20210597	Member	minh.vt210597@sis.hust.edu.vn
4	Bui Minh Quang	20214925	Member	quang.bm214925@sis.hust.edu.vn
5	Dinh Nguyen Cong Quy	20214927	Member	quy.dnc214927@sis.hust.edu.vn

As a team, we are committed to delivering a high-quality software system that meets the requirements of our client. We have put in a lot of effort and dedication into this project, and we are confident that we can successfully complete it within the given timeline.

Thank you for considering our team for this project.

# TABLE OF CONTENTS

<b>INTRODUCTION.....</b>	<b>2</b>
<b>OUR TEAM .....</b>	<b>3</b>
<b>I. EXECUTIVE SUMMARY.....</b>	<b>5</b>
<b>II. PRELIMINARY REQUIREMENT ANALYSIS.....</b>	<b>5</b>
<b>1. Overview.....</b>	<b>5</b>
1.1. Aim of the project.....	5
1.2. Business Objectives.....	5
1.3 Business Procedure.....	6
1.4 User Roles .....	7
1.5 Associated Systems .....	7
1.6 Challenges .....	8
<b>2. Function Requirements.....</b>	<b>8</b>
2.1. Users Requirements.....	8
2.2 User Roles and Permissions .....	8
2.3 Reports.....	9
2.4 Optional Features.....	10
2.5 Non-functional Requirements.....	10
<b>III. PROGRESS TO BE FOLLOWED .....</b>	<b>10</b>
<b>IV. SUGGESTED DELIVERABLES .....</b>	<b>13</b>
1. Periodic status reports.....	13
2. Periodic presentations .....	13
3. Good Faith Requirements Agreement .....	13
4. Documentation for Use and Mechanics .....	13
5. Demonstration and Client Training.....	14
<b>V. TECHNICAL FEASIBILITY .....</b>	<b>14</b>
<b>VI. VISIBILITY.....</b>	<b>16</b>
<b>VII. RISK ANALYSIS.....</b>	<b>16</b>
1. Schedule Risk.....	16
2. Resource Risk.....	16
3. Function Risk.....	16
4. Solution .....	17
<b>VIII. TERMS AND CONDITIONS .....</b>	<b>17</b>
<b>IX. CONCLUSION.....</b>	<b>17</b>

## I. EXECUTIVE SUMMARY

The HUST-PC brand is a specialized computer and IT equipment shop that operates 3 stores. The primary users of the system are customers who want to order customized computers and IT equipment, and the client is HUST-PC.

The project's primary purpose is to develop a system that facilitates the ordering process for customers and streamlines the assembly process for HUST-PC. The website will allow customers to customize the configuration of their machines and choose a store for pickup. HUST-PC will import components from one of its stores and assemble the machine according to the customer's specifications. When the computer or IT equipment is assembled, the system will notify the customer to pick up their order.

The system is designed to streamline the process of purchasing assembled computers and IT equipment and provide a convenient and customizable platform for customers. The system also supports the HUST-PC's employees to assemble, and deliver products, and optimize inventory management by allowing the stores to import components as needed.

The project's overall goal is to improve the customer experience and increase the efficiency of HUST-PC's operations. The system will reduce the time required to process orders, minimize errors in component selection and assembly, and allow for better management of inventory. The system's successful implementation will help HUST-PC to improve its profitability and maintain its competitive edge in the computer and IT equipment market.

## II. PRELIMINARY REQUIREMENT ANALYSIS

### 1. Overview

#### 1.1. Aim of the project

This project focuses on designing and developing an online platform for customers to browse and purchase products from multiple stores of brand in a single location while providing data and insights on customers' behavior, sales trends, and other metrics that can help store managers make business decisions.

#### 1.2. Business Objectives

##### **Increasing customer base**

The primary objective of the website is to attract a large and diverse customer base with varying interests and preferences by offering a wide range of products from multiple stores with competitive prices. We also strive to offer promotions and incentives to customers, such as discounts, free shipping, and loyalty rewards programs, which can attract more new *"price-sensitive"* customers, and retain loyal customers.

##### **Improving customers' experience**

We expect to provide a positive customer experience by offering a convenient and user-friendly platform for browsing and purchasing products, with excellent customer service including timely and helpful responses to inquiries and issues and establishing trust and credibility with both buyers and sellers by ensuring a secure and reliable platform for

transactions. This can help enhance the brand's reputation, and maintain HUST-PC's competitive edge in the marketplace.

### **Lowering marketing cost**

By implementing effective online advertising strategies such as targeted advertising, email marketing campaigns, or social media outreach, the system makes it easier for store managers to reach new customers and retain the familiar ones. The website typically earns a commission or fee on each sale, which contributes to its revenue.

### **Streamlined logistics**

The system handles many of the logistics associated with selling online, such as payment processing, order fulfillment, and customer service, while also supporting employees with assembling and delivering the product, which is expected to reduce the workload for the employees, save time and resources,...

## **1.3 Business Procedure**

Typically, customers must travel to the nearest store, during its business hours, to look for the items that meet their desired specifications, then compare different brands and models based on price and features. (they may have done some preliminary research online or through friends to determine the brand, model, and features that they expect in the product). At the store, the customer may ask for assistance from a salesperson to find a specific model or to receive advice on which product would best suit their needs. If the item is available at that store, the customers can check its quality before deciding to make a purchase. Once they have selected their desired item, they can complete the purchase at the checkout and may choose to set up in-store or do it at home.

In case the product is not available, the customers can ask the salesperson if the product is available at another location of the same store. The salesperson may be able to check the inventory of other stores and inform the customer of the nearest location that has the product in stock. If the product is not available at any nearby stores, the customer may need to wait for the store to restock the product. The salesperson may be able to provide information on when the store expects to receive new inventory or when the product is expected to be back in stock. Alternatively, the customer may choose to look for a similar laptop that is available in-store. The salesperson may be able to suggest comparable models or offer advice on which laptop would be the best fit for the customer's needs and budget.

The salesperson will input the information of the customers and their orders manually into the store database and can refer to old purchases or keep track of pending orders. This would be a challenging task and takes a lot of time and effort to finish.

Our new system strives to provide customers with the convenience of shopping from anywhere, at any time, without having to physically visit a store, avoiding some nuisances such as crowds, lines or parking hassles. This also makes it easier for customers to compare prices, features, and reviews of different products before making a purchase decision. The system is integrated with automated systems to process orders, which eliminates the need for employees to manually input customer information and order details, and improves the efficiency of inventory management. Our system also provides customers with detailed product information,

reviews or FAQs when they search for a product. This would allow the customer to place an order without much assistance from the salesperson.. .

## **1.4 User Roles**

- **Customer:** Search for products on the search bar or browse through the product categories; View product image and specifications; Select the desired configuration for the products and add them to carts; Choose the store and payment method to buy the product and contact customer support; Read and add some reviews about the products.

- **Administrator:** Managing the product catalog, including adding new products, updating product information, and removing discontinued products; Monitor inventory levels to ensure that popular products are always in stock and that there is sufficient inventory to fulfill customer orders; Process and manage customer orders, including verifying payment information, updating order status, and tracking shipments; Handle customer support inquiries and resolve any issues or complaints that customers may have; analyze website performance metrics, such as traffic, sales, and conversion rates, and use this information to make data-driven decisions to improve the website's performance; implementing and monitoring security measures, such as firewalls, SSL certificates, and other security protocols.

## **1.5 Associated Systems**

- **Inventory Management System:** An inventory management system allows the brand to manage inventory levels across multiple stores and warehouses. This system ensures that each store has the right products in stock and can fulfill customer orders efficiently.

- **Point of Sale (POS) System:** A POS system enables each store to process in-store transactions, manage inventory levels, and provide real-time sales data to the brand's management team.

- **Order Management System (OMS):** An OMS allows the brand to manage and track orders across multiple channels, including online and in-store purchases. This system provides visibility into order status and enables the brand to fulfill orders from the most efficient location.

- **Customer Relationship Management (CRM) System:** A CRM system allows the brand to manage customer data, track customer interactions, and provide personalized marketing and customer service.

- **Warehouse Management System (WMS):** A WMS allows the brand to manage inventory levels in their warehouses, fulfill orders efficiently, and optimize warehouse operations.

- **Shipping and Logistics Management System:** This system enables the brand to manage shipping and delivery across multiple locations, track shipments, and provide customers with real-time updates on their orders.

- **Analytics and Reporting Tools:** These ones provide the brand's management team with insights into sales data, inventory levels, and customer behavior. These tools enable the brand to make data-driven decisions and optimize their operations.

- **Payment association system:** This system allows the customers to choose the payment method that they feel convenient when purchasing our products.

## 1.6 Challenges

Operating the website yields some problems that need to be considered:

- **Cybersecurity:** The system may face security vulnerabilities, such as hacking attempts, data breaches, and payment fraud. Protecting customers' personal information and financial data is critical to maintaining their trust and preventing potential reputational damage.
- **Technical Issues:** A large number of users accessing the website would result in technical issues such as website downtime, slow loading times, or broken links, which can ruin the user experience and affect the revenue of the brand.
- **Logistics and Fulfillment:** The system must manage inventory, shipping, and delivery to ensure that products are delivered on time and in good condition.
- **Customer Support:** The website is expected to provide excellent customer support to handle inquiries, complaints, and returns. Providing timely and effective customer support can be a challenging task.

## 2. Function Requirements

### 2.1. Users Requirements

This subsection outlines the specific needs and expectations of the system's users, including their goals, preferences, and constraints. The purpose of the User Requirement subsection is to ensure that the software system is designed and developed with the end-user in mind and that it will meet their needs and provide a positive user experience. Although the following features have been considered thoroughly by the client and development team, they may be subject to future change.

- **Manage Products:** This feature allows the users to add, edit, or delete products within the system. Users can input information such as the product name, description, price, quantity, and other attributes. Users can get access to information related to each product such as quantity, import date, ...

- **Manage Customer:** This feature enables users to add, edit, or delete customer information within the system. Users can input data such as customer name, address, contact information, and purchase history. This feature is necessary for further suggestions that match customers' preference

- **Manage Orders:** This feature enables users to manage orders within the system. Users can view order details such as the order date, customer name, product details, and payment information. They can also edit or cancel orders if necessary.

- **Payment:** This feature enables users to make purchases online or within the application. Users can browse products or services, add them to a shopping cart, and complete the purchase transaction through a secure payment gateway.

### 2.2 User Roles and Permissions

The purpose of this subsection is to outline the key features and requirements for an online store that caters to two types of users: Store Managers and Customers. The online store will allow customers to purchase products online and store managers to manage inventory,



pricing, and other aspects of the online store. Any users who wish to use the website must sign in to the system using a username and password.

- **Store Manager User Role:** The store manager user role will have access to a range of features and functionality that enable them to manage the online store. These features will include the ability to add, edit, or delete products, set pricing and discounts, manage inventory levels, and view sales reports. The store manager user role will also have the ability to manage customer orders, process payments, and initiate refunds or returns. Additionally, the store manager user role will have access to user management features, such as adding or deleting users and assigning user roles and permissions.

- **Customer User Role:** The customer user role will have access to a range of features and functionality that enable them to browse and purchase products online. These features will include the ability to browse products, add products to a shopping cart, complete the purchase transaction through a secure payment gateway, and view order history. The customer user role will also have the ability to track the status of their orders, receive notifications for shipment and delivery, and initiate returns or refunds if necessary. Additionally, the customer user role will have access to user profile management features, such as updating personal information and viewing past purchases.

## **2.3 Reports**

This subsection details the specific types of reports that the website is able to generate.

- **Sales Report:** This report should provide a summary of the website's sales performance over a specified period. The report should include information such as total sales revenue, number of orders, average order value, and breakdown of sales by product category.

- **Inventory Report:** This report should provide an overview of the website's inventory levels for all products. The report should include information such as total inventory count, available inventory, and inventory value.

- **Customer Report:** This report should provide a summary of customer data, including customer contact information, purchase history, and any other relevant customer information.

- **Shipping Report:** This report should provide a summary of all shipments made by the website, including tracking information and shipping status.

- **Marketing Report:** This report should provide an overview of the website's marketing efforts, including data on ad campaigns, email marketing, and social media engagement.

- **Financial Report:** This report should provide a summary of the website's financial performance, including revenue, expenses, and profits.

Each report should be customizable based on specific date ranges, product categories, and other relevant parameters. Reports should be available for download in various formats, such as PDF and CSV, and should be easily accessible to authorized users via a secure login.

The website should also allow users to schedule automatic report generation and delivery via email on a regular basis. The system should generate reports automatically and send them to the designated recipients without any manual intervention.

## 2.4 Optional Features

This subsection lists some other features that are common among other online shopping websites. The development team recommends that these features should be available on the client's website as well.

- **Wish List:** The website may include a wish list feature that allows customers to create and manage a list of items they are interested in purchasing at a later date. This feature can enhance the customer shopping experience and increase the likelihood of future sales.

- **Product Reviews:** The website may allow customers to write and submit product reviews for items they have purchased. This feature can provide valuable feedback to other customers and help to build trust on the website and its products.

- **Related Products:** The website may include a related products feature that suggests complementary or similar products to the customer based on their current selection. This feature can increase the average order value and improve the customer shopping experience.

## 2.5 Non-functional Requirements

Performance and Scalability criteria will be evaluated carefully and more details on these criteria will be available in future reports. Security criteria will also be available after a thorough discussion with the clients. The website is designed to have an intuitive and user-friendly interface that is easy to navigate.

## III. PROGRESS TO BE FOLLOWED

The process model we choose to develop our project is the Agile-Scrum development model. We choose the Agile-Scrum model because it emphasizes flexibility and adaptability, allowing us to respond to changes and feedback quickly, which is important for our project as we are students and still learning. Additionally, the model enables effective communication within the team and ensures that everyone is aware of the project's progress.

Our development process will consist of several distinct phases, each with its own set of tasks and outputs. Specifically include:

### Sprint 1: Analysis (2 Weeks)

- **Tasks:**
  - + Learn about products in the same field.
  - + Analyze customer functional and non-functional requirements.
  - + Select the most suitable development model.
  - + Identify documents required for the project.
- **Outputs:** The required documents for the project.

### Sprint 2: Design (2 Weeks)

- **Tasks:**
  - + Identify the functions, features, and user interface that need to be designed for the HUST-PC website.

- + Design user interfaces (UI) for system functions with visual design tools like Figma, or Adobe XD,...
- + Build use cases to describe the functionality of the system.
- + Design classes and methods to implement the designed functions and use cases.
- + Overall architecture design of the system.
- + Design database to support required features and functionality.
- **Outputs:**
  - + Design user interface (UI) of the HUST-PC website, including UI drawings that thoroughly layouts, colors, images...
  - + Design database for the HUST-PC website to support required features and functionality.
  - + Use case diagrams and detailed use case descriptions.
  - + Database design consists of ERDs and tables that enumerate data tables and the relationships between them.
  - + Design classes and methods in code that are allocated to designed functions and use cases.

### **Sprint 3-5: Development (2 Weeks)**

- **Tasks:**
  - + Design and set up the database for the system.
  - + Programming basic web pages and functions of the website (including user sites and Administrative sites)
  - + Implement the main functions of the system according to the design defined.
  - + Add additional functions if necessary
  - + Develop security features
  - + Create user documentation
- **Outputs:**
  - + The basic websites, main functions are programmed and work as designed
  - + Create several test sites to test the website features
  - + Additional functions are added if necessary
  - + Security features are well-developed and working

### **Sprint 6: User Acceptance Testing (2 Weeks)**

- **Tasks:**

- + Prepare Test scenarios
- + Functional testing
- + Performance testing
- + Security testing
- + Collect feedback from users to improve user experience and resolve detected issues
- + Overall evaluate the results of testing to improve the product before deploying.
- **Outputs:**
  - + Test report: Includes detected errors, problems, and solutions to fix them.
  - + Summarize the results of testing to improve the product before deployment.

### **Sprint 7: Deployment (1 Week)**

- **Tasks:**
  - + Prepare the deployment environment on the server.
  - + Backup all files and databases of the website platform
  - + Deploy source code and database to the server.
  - + Configure the domain name and DNS to access the website
- **Outputs:**
  - + The website platform is deployed successfully on the server.
  - + Domain and DNS configured to access the website
  - + Documentation of deployment and configuration procedures will be archived for future maintenance.

### **Sprint 8: Maintenance (Ongoing)**

- **Tasks:**
  - + Monitor the system to detect errors or problems and fix them
  - + Upgrade and update the system to meet new requirements and improve performance
  - + Train and support users to use the system effectively
- **Outputs:**
  - + Documentation and training include creating and upgrading user manuals, guides, and training materials.
  - + Report bugs and problems found and how to fix them
  - + Report on system performance after updating.

## IV. SUGGESTED DELIVERABLES

### 1. Periodic status reports

The report will contain a list of complete tasks, in-progress tasks, an estimated timeline for completing the remaining tasks, any issues or challenges that have arisen during the project, along with any proposed solutions ...

The report will focus on correcting any misunderstandings or errors in the client's requirements and outlining the next steps that need to be taken in order to complete the project.

### 2. Periodic presentations

After each milestone, the presentation will report on the status of the project, including what has been done and the plan for completing the remaining work to develop the website

The client's feedback about the project will help us to reconfirm the design and functionality of the website, along with our proposals to solve any problems encountered during the website development.

### 3. Good Faith Requirements Agreement

- **Project scope:** The project scope is to develop a computer-selling website that allows customers to browse and purchase computers online. The website should include product pages with detailed descriptions, specifications, and pricing, as well as a shopping cart and payment gateway.

- **Timeline:** The project timeline is at least 10 weeks, with key milestones and deadlines as above.

- **Roles and responsibilities:** The roles and responsibilities of each party involved in the project are as follows:

+ **Client:** Provide feedback on website design and functionality, provide product information and images, and make payments according to the payment schedule.

+ **Developers:** Design and develop the website, create product pages, integrate the shopping cart and payment gateway, and provide regular updates on project progress.

- **Communication plan:** The parties will communicate via email and phone on a weekly basis to discuss project progress and any issues or concerns.

- **Confidentiality and intellectual property:** The client retains all rights to their product information and images. The developer agrees to keep all client information confidential and not to use it for any purpose other than the development of the website.

### 4. Documentation for Use and Mechanics

We will provide documentation about the website and a guide on how to efficiently use the system upon request.

## **5. Demonstration and Client Training**

In addition to documentation, clients may require training for their staff to use the system. Our team will respond to this need by providing presentations of the system (in various stages of completion) throughout the project (in collaboration with our periodic presentations) and by allocating time after the final system is completed to train the customer's employees on how to use it.

## **V. TECHNICAL FEASIBILITY**

To meet the needs of customers, the team proposes an online sales website system for the HUST-PC brand, in which customers can customize their computer configuration and IT equipment on the website and select the store to receive the goods. Below is the technical feasibility of the proposed solution:

### **1. Platforms**

The website system will be built on an open-source software platform, such as WordPress or Magento, to ensure flexibility and easy expansion in the future. This flexibility allows development and customization according to customer requirements and ensures compatibility with the latest technologies.

### **2. Database**

The system uses a MySQL database to store product, order, and customer information. This database will be designed and optimized to ensure good consistency and scalability in the future.

### **3. Server**

Due to budget requirements and limited deployment time, we were unable to rent a private server to deploy the application. Instead, we will implement a web server on a laptop to serve requests from clients using Apache HTTP server software. Although this solution may be resource-limited, it is still a popular and reliable solution for deploying web applications in development environments.

### **4. Programming Languages**

The system's web interface will be coded in PHP or Python to interact with the MySQL database. Use popular programming languages like HTML, CSS, and JavaScript to design user interfaces. The use of these popular programming languages makes system implementation and maintenance easier.

### **5. Customization**

The system will assist in customizing the configuration of customers' computers and IT equipment through an intuitive and easy-to-use interface. This allows customers to customize the specifications according to their needs and make shopping more convenient online.

### **6. Inventory Management**

The system will manage the number of products in each store's inventory to ensure that customers can choose the most suitable products and stores. Inventory management helps ensure availability and efficiency in product management. The system will allow managers to track the number of products left in stock and update the latest product information. Warehouse management will help prevent products from being out of stock or not having enough stock to serve customers.

## **7. Administration Interface**

The system will have an administrative interface that will allow the administrator to add new access levels, change the classification description, and make the necessary modifications to the reporting system or central data warehouse. The administrative interface will help administrators easily perform system management tasks while minimizing the time and effort invested in data management.

## **8. Automatic Report Generation**

The system will automatically generate reports as one of the main goals of the transition to a computerized, automation system. Automated report generation saves administrators time and effort in report building, and improves the accuracy and reliability of reporting information.

## **9. Security**

The system will use a login and password protection system based on access level or user type to ensure the security of customer data and information. The system will also be regularly updated to ensure security and prevent cyber attacks. All customer and transaction information will be encrypted and protected to ensure privacy and security.

## **10. Scalability**

The system is designed to be scalable, capable of meeting the needs of customers when many users simultaneously access the website. The enhancement of scalability for the system will help ensure the stability and reliability of the system during future development and expansion.

In conclusion, the proposed ***HUST-PC Project*** has at least one technically feasible solution. This viable system will use a centralized MySQL database, a web server built with Apache HTTP, and a web interface coded in popular programming languages such as HTML, CSS, and JavaScript. The combination of these freeware products and the team's own coding will meet customer requirements.

To assess the technical feasibility of the ***HUST-PC Project***, the team needed to consider several important factors. With about 20-30 users expected to be able to access the system concurrently, it is necessary to ensure that the hardware limitations of the server are strong enough to meet this requirement.

Also, to optimize the system's performance, the team may consider using other programming languages like Node.js or Python instead of PHP. These languages can provide better scalability and processing speed for web applications.

Finally, note that the final system delivered to the customer may differ from the technically viable system proposed here. The purpose of this exercise is to determine if the project is viable, and a focus on system requirements will be made to optimize architecture and performance.

## **VI. VISIBILITY**

In an effort to get feedback, we will have meetings face-to-face, discussions through email, regular reports, and live presentations ... There will be regular meetings with the client to report on the progress of the project and to confirm the requirements of the website. Email is also a way to contact the client and the development team. We will use email to discuss and solve any difficulties that arise during the website development process, or to clarify any unclear requirements with the client. A regular report about the project's progress will be sent at each milestone, including a live presentation of what the team has achieved. This will allow us to determine if there have been any changes in the client's requirements or if there is anything the client is not satisfied with. We will also provide a website demo to the client, which will include the design and functionality of the website.

## **VII. RISK ANALYSIS**

### **1. Schedule Risk**

Because of the fact that the deadline of this project is within a seminar, adding any extension is likely to be impossible. This is one of the most fundamental problems leading to an alarm that the system could not be completed to meet all demands of the client in that period of time. In that case, there could be an underlying repercussion about the delay of system launching if the client chooses to wait for the system to be fully completed.

### **2. Resource Risk**

These problems are related to the technology which is available for teams to build up this software. Because of some external factors, such as financial, references,... this software must be designed with the most economical possible. This can be illustrated by the fact that teams need at least a computer using LINUX hardware with the aim that this software could run smoothly in various kinds of hardware.

Moreover, we are considering using open resources provided freely in order to be financially efficient, even the hardware also depends on the available library. This could lead to some risks of system errors, hardware errors, and code errors,... which may come to several unintended losses of data. The unpredictable issues in the future could come from the variety of browsers, which might have a slight difference in users' interface.

### **3. Function Risk**

This part is related to how the system works. There could be issues that the user's interface is not friendly or the client is not satisfied with one, some features of the software, or the software doesn't work as the client's expectations - the most dangerous problem in this section. However, the function risk is the most solvable of all three risks mentioned above. The team could get rid of one or some features of the software, one or some parts of the system, so the change could reduce the issues about it. Even so, our team tries to limit this as much as



possible. The client should be mentioned this part in order for our team to meet the deadline at the end of this seminar.

#### **4. Solution**

After considering all possible obstacles that our teams might be surmounted, we have been preparing a series of actions for reducing the risks as much as possible. Our teams agreed to closely follow the progress which has been mentioned above. The client could also supervise each section in the progress. Many demonstrations have been designed with the aim that the client could test the feature, become familiar with the software and maximize the time for each section. Often asking and checking with the client is crucial for our team to complete the project. Our teams often ask for the response of the clients and change the target of each section to satisfy the client's expectations and meet the deadline.

### **VIII. TERMS AND CONDITIONS**

- **Intellectual Property:** All intellectual property rights on the website, including but not limited to the design, code, and content, will belong to you upon completion of the project and receipt of full payment. Until then, we retain ownership of all intellectual property rights on the website.

- **Confidentiality:** We will keep all information related to the project confidential and will not disclose it to any third party without your consent. You agree to keep all information related to our services confidential and will not disclose it to any third party without our consent.

- **Warranties and Representations:** We warrant that we will perform our services with reasonable care and skill. You represent and warrant that you have the right to use all content and materials, provided to us for use on the website

- **Limitation of Liability:** We are not liable for any damages, including but not limited to, direct, indirect, incidental, or consequential damages arising from the development or use of the website

- **Changes to Terms and Conditions:** We reserve the right to change these terms and conditions at any time, without notice. Your continued engagement of our services after any changes indicates your acceptance of the new terms and conditions.

- **Contact Us:** If you have any questions or concerns about these terms and conditions, please contact us using the following email address: [helarica.student@gmail.com](mailto:helarica.student@gmail.com). Alternatively, you can reach us by phone at (+84) 97 987 01 56, or by email at [truong.pd214937@sis.hust.edu.vn](mailto:truong.pd214937@sis.hust.edu.vn).

### **IX. CONCLUSION**

After the feasibility study has been conducted, our team could reach the conclusion that the HUST - PC band's project is feasible in the aspect of technique, skill of team members, and deadline. Within a seminar, our teams should manage to complete the project and meet all requirements of the client. All members of our team have enough skills and knowledge to design the software at the client's request. This part concludes that this project is possible to continue developing.