Software Project and Process Management Project Charter

"ICE"—Online Entity Game Store

Team Member

1754060 Zhe Zhang

1753414 Di Bu

1753188 Kaixin Chen

1. Project Name or Identification

This project will implement a entity game sales platform, we named it ICE. Steam is a well-known online game sales platform, and ICE means "entity" steam, which is an online entity game sales platform.

2. Project Stakeholders

Name	Role	Position	Phone numbers	E-mail address
Zhe Zhang	Sponsor	ICE, CEO	15216805515	doubleZ0108@163.com
Zhe Zhang	Project Manager	ICE, manager	15216805515	doubleZ0108@163.com
Di Bu	Requirements Developer	ICE, requirement developer	17717924664	997219957@qq.com
Zhe Zhang	Risk Manager	ICE, risk manager	15216805515	doubleZ0108@163.com
Kaixin Chen	Quality Assurance	ICE, quality assurance manager	15316172513	1536768420@qq.com
Zhe Zhang	Developer	ICE, IT department	15216805515	doubleZ0108@163.com
Di Bu	Developer	ICE, IT department	17717924664	997219957@qq.com
Kaixin Chen	Developer	ICE, IT department	15316172513	1536768420@qq.com
Di Bu	Team Member	ICE, consultant	17717924664	997219957@qq.com
Kaixin Chen	Team Member	ICE, consultant	15316172513	1536768420@qq.com
Prof. Huang	Advisor	Client Representative	—	huangjie@tongji.edu.cn

3. Project Description

3.1 Background

With the development of platform like steam and GOG, digital games seem to be the very first choice for computer gamers nowadays. However, gamers of other gaming console still tend to buy entity games for purpose of collecting or others, and this market is still booming with more and more gamers buying game consoles. However, there doesn't exist a comprehensive platform for players to buy entity games of different consoles from different video game companies. So here comes ICE!

ICE is an online store selling entity games from different game companies for gamers owning different gaming consoles. Authorized by the game publishers, we sell only the legal copies and provide an easy access to purchasing entity games. Besides, we encourage players to discuss the game products freely, thus to build a community gathering players from all over the world.

3.2 Description of the challenge or opportunity

Challenge: In the early stages of platform development, there needs to be enough game content for players to choose. This requires us to conduct accurate research on the game styles that players love. In order to ensure the maximum initial benefits, we need to work with game manufacturers Communicate to make the released games have good sales. At the same time, please ensure that the transaction content is a legal copy. The games sold on the platform must meet the standards. The game content must be reviewed to ensure that it meets the legal requirements before it can be placed on the transaction. Exemplary role. In the transitional stage of the development of the website platform, the transaction volume increases and the transaction content increases. At this time, we need to pay attention to efforts. We must strengthen the standardization and security of platform transactions, ensure the safety of the reputation of users and game manufacturers, and ensure the platform The reliability and stability of the trading model, at the same time, we must pay attention to the creation of the platform atmosphere, and create a community culture of physical games, which is both an opportunity and a challenge.

Opportunity: If we can ensure full communication with manufacturers and users, and solve problems in a timely manner in the early stages of the platform, the game styles sold by the platform will be more popular, and it will help to establish a good reputation early and attract users quickly. Amplify. If we can make enough achievements in the security of platform transactions, then the transaction model will become more standardized and safe, which will also help our credibility to further improve. With a unique sales style, in the subsequent development, we can strive to create a platform atmosphere, guide the platform culture, give users a greater sense of belonging, and lay a solid foundation for future development.

3.3 Overview of the desired impact

ICE's strategic goals include continuous growth and profitability, as well as increasing awareness and building a platform atmosphere. This project is based on the entity game market. It hopes to attract users' favor with comprehensive and exquisite games, and optimize the work of managers with concise and refined operation methods. It will improve customer performance with excellent early warning and feedback, and gradually create a user online purchase entity games is the preferred platform and provides long-term and stable services for our buyers and partners. In order to achieve this goal, it is necessary to ensure sufficient game sources, and a certain amount of overhead is allowed in the early stage to increase the popularity of the platform and the complete game purchase experience.

4. Measurable Organizational Value (MOV)

Area of Impact	The project will be successful if ...
Customer	Within 3 months 65 percent of our customers will visit our website at least once a week.
Strategic	We will develop and manufacture an exclusive flagship game by April 1 next year, and its price is $ 20 lower than the most popular games of its competitors.
Financial	By the end of the next quarter, our game sales growth will increase from 3% to 6%.
Operational	By the end of this fiscal year, our inventory turnover rate has increased by 15%.
Social	The number of accidents in our platform will be reduced to zero next year.

5. Project Scope

5.1 What will be included in the scope of this project

Access of the game store for customers and management of the company must be accomplished through a Web site. The user can access it via PC or mobile device.

The system must allow customers to search in our system for his or her favorite game and add games to shopping cart or wish list. Gamers with different game consoles can buy all sorts of physical games easily. And what is super significant is that they need to confirm what they buy are legal copies. To ensure that, the system must maintenance a gamers forum that all customers could refer to the comments from others before buying the specific game and delivery personal opinions on a product after they purchase the game. When the game is ordered, it is delivered immediately if available in stoke, or else, the specific game is ordered to the publisher, and a compatible deadline is informed to the customer.

The system must give publishers a platform to add new games, managing game-related information, and managing orders conveniently. The functions about the information management of games are only belong to the publisher, ordinary users do not have these permissions. Besides, because publishers always look forward to a lower cut of the sale platform, with audience owning all sorts of game consoles and a lower middleman's cut, ICE will provide a suitable share of the profit to fit publishers' demands.

The system must allow a manager to generate reports on bestselling games, and on most profitable customers, as well as suggest games for buying based on past customer's interests. Furthermore the system must have the capability of predicting the sales in order to provide better decision (inventory, reordering products, etc.) with the solid foundation. When a entity game is set to be delivered, the system should be able make a decision of selecting the most economical way provide that the deadline can be met.

5.2 What will be considered outside the scope of this project

Logistics inquiry : In this project, after the transaction between the buyer and the merchant is completed, only the logistics order number is provided to the buyer after the logistics is issued, and no real-time detailed logistics query is provided. The user can query the logistics information through the logistics order number as needed.

Friends: This project does not provide a friend function. Each user exists as a separate buyer, but different users can exchange information about products through forum.

Live broadcast: This project does not support users to set up a live game broadcast function on the platform. For the introduction of game content, we support the display in the details page in the form of pictures and videos.

Hardware: This project only provides sales channels for entity games, and does not allow other hardware products to be sold on the platform.
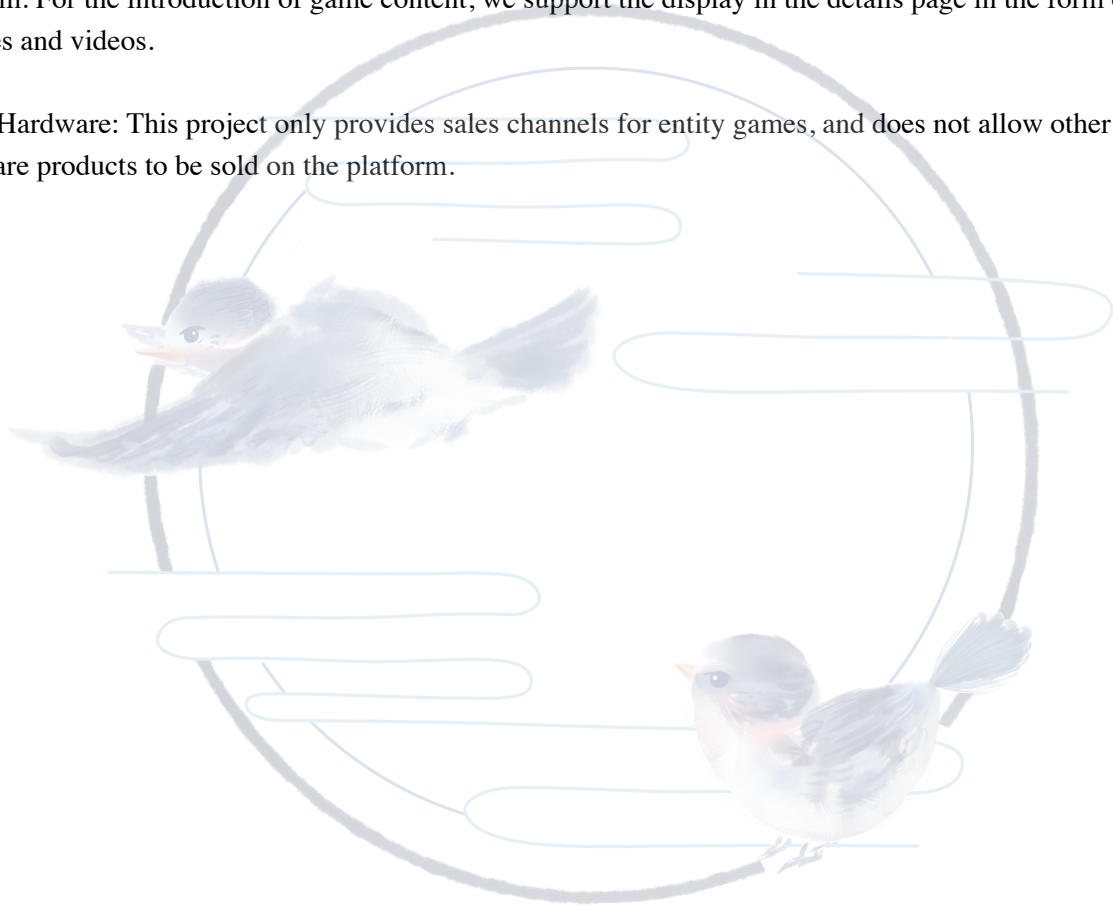
6. Project Schedule Summary

Project start date: April 12.
Project end date May 4.

## 6.1 Timeline of project phases and milestones

The project uses an activity-based approach to identify activities, divides the project into the main life cycle stages, considers the activities of each stage and its activity cycle separately, and analyzes the pre-activities of individual activities to obtain the following activity list :

No.	Activity	Estimated Duration (Weeks)	Depends on
A	Requirement Analysis	2	
B	UI Design	3	A
C	Data Design	2	A
D	Architecture Design	2	A
E	Interface Design	3	A
F	Design Review	2	B, C, D, E
G	Frontend Coding	4	F
H	Backend Coding	5	F
I	Software Testing	2	G, H
J	User Document	3	F
K	Deployment and System Testing	3	I
L	User Training	1	J

Network plan is like below, with the yellow background highlights the **Critical Path** :
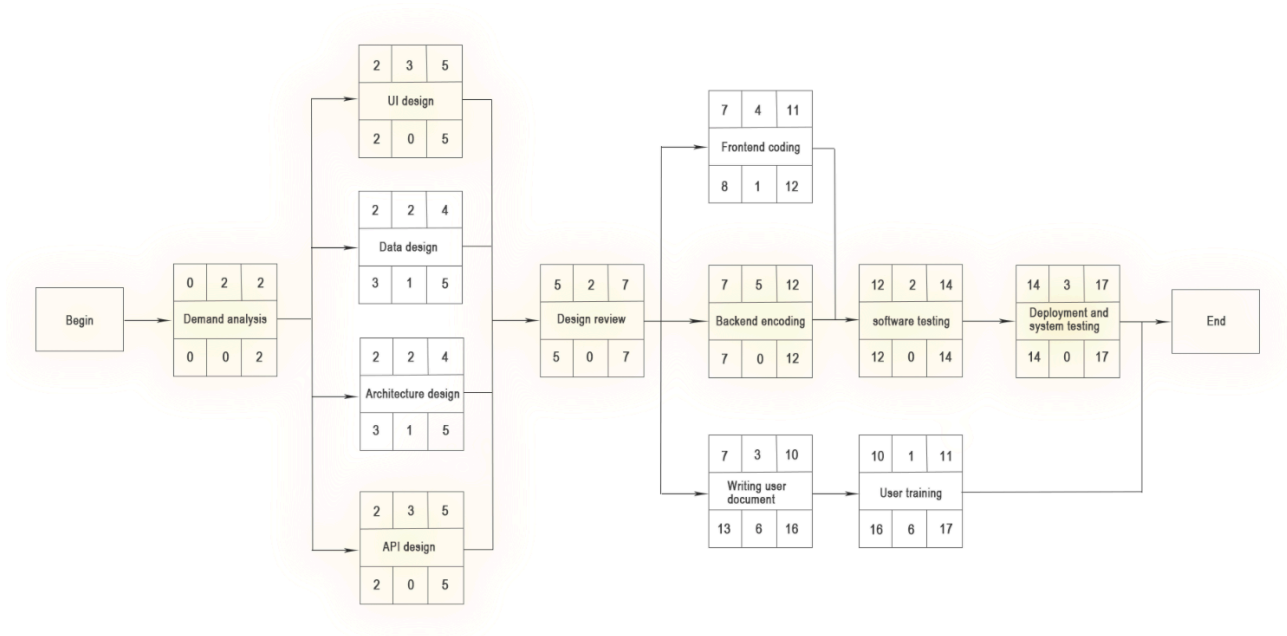
Relative **Gantt chart**:
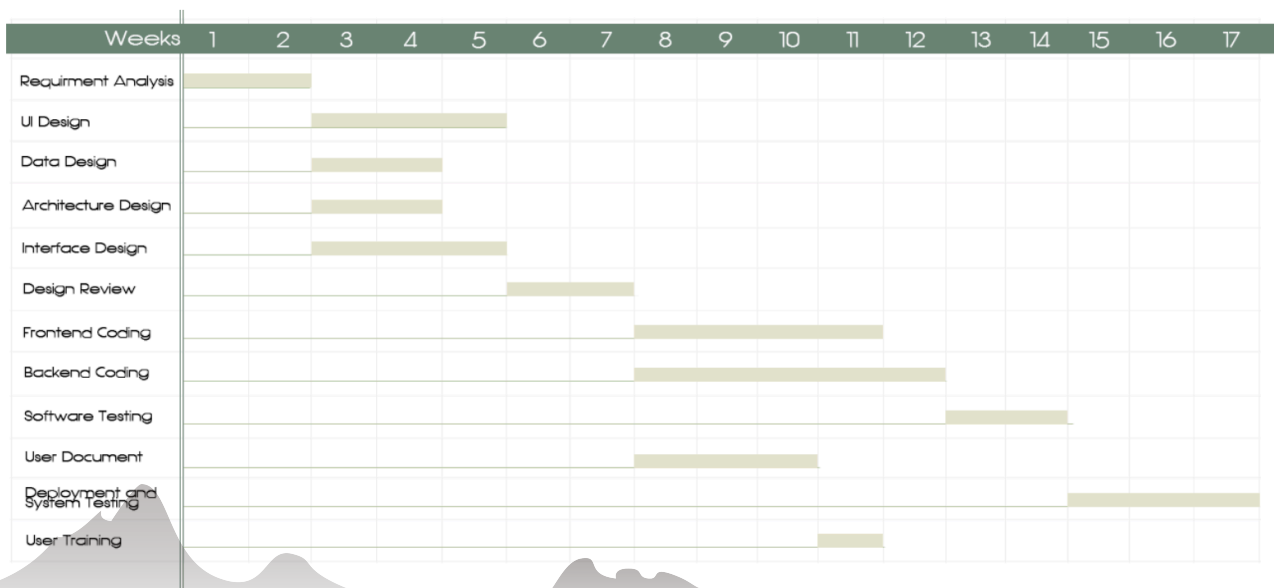
6.2 Project review and review dates

We will deliver the project on May 4th, and the main results include the official game sales platform and the merchant back-end management platform. Their specific details will be described in relevant documents.

7. Project Budget Summary (Skip)

8. Quality Issues

8.1 Specific quality requirements

Software engineering documents need to comply with IEEE standards

Code writing needs to comply with code specification standards

The project summary report needs to meet the reference textbook standard

9. Resources Required

Resource	Name of resource provider	Date to be provided
People	Our development team	April 12
Technology	Our development team	April 12
Facilities	Our development team	April 12
Meeting room	Zhe Zhang	April 12
Document specifications	Prof.Huang	April 12

10. Assumptions and Risks

As this project is a separate course project with smaller specifications, there is no high degree of technical dependence and dependence on other projects, and the project has little impact on different areas of the organization. Therefore, in this module, we do not use the classic risk assessment method for large software projects, but design our own risk assessment for this course project.

In the risk identification of this project, we adopted the risk identification method combining **Checklist method** and **Brainstorming method**, referred to checklists models such as **lyytinen model** and **Barry Boehm model**, and established our own checklists as follows:

No.	Risk	Risk reduction techniques
R1	Team members did not communicate well	Agree on the way of communication; Regular communication of work progress; The minutes of the meeting
R2	Technology adopted is flawed	Use familiar technology; Specially-assigned person to study the new technology needed
R3	Project management structure is not clear	Formulate the management structure; Special personnel to maintain the management structure
R4	Code integration issues	Convention code specification; Incremental development and integration
R5	Personnel changes	More than one person participated in the core work of the project in order to familiar with the project process
R6	Implementation tools do not meet the requirements	Early implementation of the sources of tools; Look for alternative tools
R7	Change to requirements specification during coding	Stringent change control procedures High change threshold Incremental development(deferring changes) Agree on the requirement change control process in writing and record the change request
R8	System quality and performance risks	More exchange of work results; Inspection and review; Using performance test

11. Project Administration

1. Communications plan

Continuously update the project report during the process of the project, compare the expected progress with the actual progress in the form of burn down charts, etc., and hold regular meetings with stakeholders to discuss the project.

2. Scope management plan

Continuously update the progress during the project. If there are changes that are different from the expected plan, upload to git and notify in time to ensure that the development team is always clear about the scope of the project. You can also submit, record and view the scope management through git

3. Quality management plan

During the project process, the project is divided into relatively independent small modules. After each module is completed, special module test work is designed to ensure the quality of the project in progress, and to avoid hidden risks in the project due to early vulnerabilities. Testing and correction can fully guarantee the quality of the project
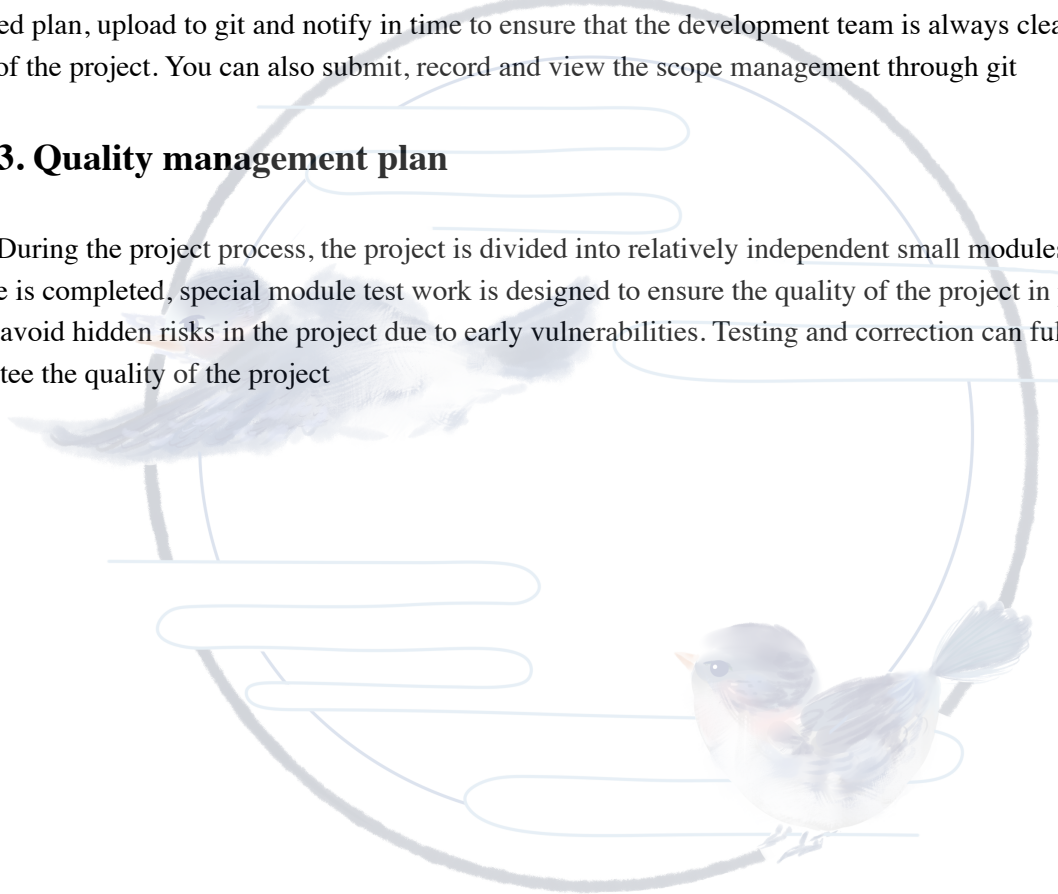
12. Acceptance and Approval

Name: Zhe Zhang, Kaixin, Chen, Di Bu

Signature:

Dates for approval: May 4.

13. References

Pierre, BOurque. Richard, E. (Dick) Fairley. SWEBOK: Guide to the Software Engineering Body of Knowledge. IEEE, 2014.

Kathy, Schwalbe. Information Technology Project Management. Boston, MA, 2011.

Bob, Hughes. Mike, Cotterell. *Software Project Management*. 2009.

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Dmitriy, Nizhebetskiy. Software Development Life Cycle and Project Management. pmbasics101.com/software-development-life-cycle/. Accessed 13 April 2020.

14. Terminology or Glossary

No.	Terminology	Explanation
1	Customer	People shopping on this electronic shopping platform
2	Publisher	Provider of entity game sources in the system
3	Sales manager	One of the administrator users, execute sales-related decisions and operations in the system
4	Customer service	Online employees who provide users with after-sales, recommendation and other services in the system
5	Logistics manager	Responsible for shipping docking with the publisher, warehouse management and logistics outsourcing
6	Financial Statements	Organize and count the financial status of the bookstore's income and expenditure over a period of time, and display it visually, mainly to provide financial analysis basis for financial managers.
7	Forum	A platform for users to exchange experiences
8	General functions	Features that will be used by all users of the system
9	W3C standard	That is the World Wide Web Consortium standard, it is not a certain standard, but a collection of standards. The web is mainly composed of three parts: structure, presentation, behavior.