Project Management Plan Version 1.0

Date

Project Name: AlphaXiu Gobang Webgame Project

Modification record:

|  |  |  |
| --- | --- | --- |
| Modifier | Modify time | Modify Content |
| 周灿苗，曹云舒 | 2021.10.11 | Create a new document and improve the content |
|  |  |  |
|  |  |  |
|  |  |  |

目录

[1. object 2](#_Toc85370787)

[2. Project Overview 3](#_Toc85370788)

[2.1 background 3](#_Toc85370789)

[2.2 Business opportunity 3](#_Toc85370790)

[2.3 Project purpose 3](#_Toc85370791)

[2.4 Scope 3](#_Toc85370792)

[2.5 Project Objectives 4](#_Toc85370793)

[2.6 Project assumptions and constraints 4](#_Toc85370794)

[2.7 Critical success factor 4](#_Toc85370795)

[3. Project Organization 5](#_Toc85370796)

[3.1 Project team introduction 5](#_Toc85370797)

[4. Management and Technical Processes 5](#_Toc85370798)

[4.1 Management process 5](#_Toc85370799)

[4.1.1 Management goals and priorities 5](#_Toc85370800)

[4.1.2 Project control 6](#_Toc85370801)

[4.2 Technical process 6](#_Toc85370802)

[4.2.1 Development methods and techniques 6](#_Toc85370803)

[4.2.2 Development tools 6](#_Toc85370804)

[5. Work to Be Performed 6](#_Toc85370805)

[6. Schedule Information 7](#_Toc85370806)

[7. Budget Information 7](#_Toc85370807)

[8. Reference 8](#_Toc85370808)

# 1. object

The purpose of the project management plan (PMP) document is to provide project stakeholders with an approved work guide on how to manage, execute, monitor and control the Gobang project AlphaXiu Gobang Webgame. The project management plan describes how the project will be organized, staffed, and project stakeholders identified. The project management plan outlines the specific details of the project management methods used in each project management phase. The information captured in the PMP will be used as a method to communicate the project deliverables that will be created for the project, and should be used to successfully manage the project.

# 2. Project Overview

## 2.1 background

（1）Most of the gobang games on the current market are relatively mature, but most of them are provided to users in the form of installation packages, and the game experience is slightly inconvenient. What we are trying to build is a gobang game based on a web platform, and at the same time, on the basis of providing two-player games. The function of man-machine game has been added, which greatly enhances the fun of the gobang game.

（2）Today, with all kinds of competitive pressures, an interesting gobang game can provide more fun to our lives.

## 2.2 Business opportunity

At present, many people are faced with this huge social pressure. An instant gobang puzzle game has great appeal, which can effectively relieve the pressure and facilitate people's lives.

## 2.3 Project purpose

The purpose of the project is to design and implement a gobang puzzle game based on a web platform, which can be used for two-player battles or man-machine games. It has the characteristics of being ready to use and interesting, providing users with a platform to relieve pressure.

## 2.4 Scope

(1) User scope:

All users who have the Internet conditions.

(2) Software scope:

① The web version of the Gobang puzzle game.

② Two-player battle function: support two people to play the game.

③ Man-machine battle function: support single player to play games, and the computer will automatically make chess decisions.

## 2.5 Project Objectives

(1) Design and complete a Gobang puzzle game based on the web platform before the end of the course, and complete the realization of all use cases.

(2) Complete the production of relevant project documents in the process of designing and implementing the project.

(3) Strengthen the software project management capabilities of project team members.

## 2.6 Project assumptions and constraints

(1) Project assumptions:

Almost everyone currently has the ability to connect to the Internet.

(2) Project constraints:

① Scope constraints: complete a web version of the Gobang puzzle game, with two-person and man-machine combat functions; complete related software documents and project management documents.

② Time constraints: The project needs to be completed before 2021.12.26.

③ Cost constraint: ensure that the project expenditure is 0.

## 2.7 Critical success factor

(1) In the entire system development life cycle (SDLC), the project manager maintains the high priority of the project.

(2) Develop and implement a strict change management plan to effectively manage resistance to changes.

(3) Project team members learn and master relevant skills in advance.

# 3. Project Organization

This project is divided into three iterations to complete: the first iteration completes the project's startup and planning phase; the second iteration completes the project design and coding phase; the third iteration completes the closing phase.

## 3.1 Project team introduction

|  |  |
| --- | --- |
| Menber | Role |
| 陈涵 | Project manager |
| 张天乐 | Software engineer |
| 周灿苗 | Software engineer |
| 曹云舒 | Test engineer |

**Table 1. Assignment of tasks**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | 1.1 | 1.2 | 1.3 | 1.4 |
| demand analysis | M |  |  |  |
| feature design |  | M/E |  |  |
| Software development |  |  | E |  |
| software test |  |  |  | T |
| Schedule management | M | M | M | M |

**Table2.Task assignment matrix（M: manager, E:software engineer, T:test engineer）**

# 4. Management and Technical Processes

## 4.1 Management process

### 4.1.1 Management goals and priorities

(1) Basic management principles:

Project team members discuss and make decisions together, and all task will be implemented in a timely manner after being reviewed and approved by the project manager.

(2) Priority:

① Demand priority:

1. Complete the Gobang two-player battle function;
2. Complete the man-machine battle function of Gobang;
3. Optimize system fluency and provide a good user experience;
4. Beautify the system UI interface;
5. Add other interesting functions on the basis of completing the system functions.

② Resource priority:

Prioritize resources for key tasks in the project process. The resources used in this project are mainly project members’ own computers, which are relatively sufficient.

### 4.1.2 Project control

(1) Project members report the project progress weekly, and use Gantt chart to assist in project progress management;

(2) Control of project changes: When the requirements need to be changed, project members negotiate together and the project undergoes supervision.

## 4.2 Technical process

### 4.2.1 Development methods and techniques

Front-end development uses JavaScript, back-end development uses python, combined with object-oriented development. And finally completes a static web page and deploys it on Gitee.

### 4.2.2 Development tools

VScode, Pycharm, NodeJS

# 5. Work to Be Performed

(1) Determine project requirements and formulate software requirements specifications;

(2) Carry out system design, development, testing and deployment;

(3) Complete software project management related documents.

# 6. Schedule Information

(1) The first iteration:

① Complete the preparation of the use case document

② Complete UI interface design

③ Develop project management plan V1.0

(2) The second iteration:

① Complete front-end coding

② Complete back-end coding

③ Develop project management plan V2.0

(3) The third iteration:

① Further improve and complete the software documentation

i. Software requirements specification

ii. Use case documentation

iii. Software design documents

② Further improve and complete project management documents

i. Project Charter

ii. Demand management plan document

iii. Schedule management plan document

iv. Cost management plan document

v. Human Resource Management Plan Document

vi. Quality management plan document

vii. Risk Management Plan Document

viii. Work breakdown structure and WBS dictionary

ix. Scope Statement

③ Develop project management plan V3.0

# 7. Budget Information

The hardware and software information and human resources required for this project are all available. Project development does not require a budget. Everyone uses their own computer to complete this project.

# 8. Reference

Reference to *SCUT Online Black Market Project Management Course Case*