**Undergraduate Final Year Project Proposal**

**Fairy of the World: Magical Journey**

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# I. OVERVIEW

The Unity Game project titled "Fairy of the World: Magical Journey" is carried out in the context of increasingly powerful information and communication technology, especially in the field of electronic entertainment. The fierce competition between game manufacturers requires creativity and originality in creating new and attractive products for players. Meanwhile, Vietnam's folk tales, which are rich in traditions and cultural values, have not been fully exploited in the game industry. Therefore, this project was born to meet the entertainment needs while contributing to the preservation and promotion of national cultural values.

The responsibility and role of this project in creating a quality game product imbued with Vietnamese cultural identity are well recognized. Step by step learn and deeply study about the fairy tales of the world, the desire to bring them into the game world in the most realistic and vivid way is expressed. Thereby, players not only experience exciting adventures, but also have the opportunity to learn about the cultural identity, history and traditional moral values of the nation.

The goal of this project is to contribute to raising awareness and love for ethnic culture in the gaming community, especially young people. Hopefully, "Fairy of the World: Magical Journey" will become a unique game product, leaving a deep impression in the hearts of players, and at the same time bringing useful and meaningful entertainment moments. .

To this end, constant efforts are made in the research, design and development of the project, and actively cooperate with experts in the field of technology and culture to ensure the authenticity of the project. accuracy and attractiveness of the game. Believe that, with passion, determination and tireless efforts, the project "Fairy of the World: Magical Journey" will become an important contribution in preserving and promoting the cultural values of the people. Vietnamese ethnic group in the modern game world.

# II. AIM

The aim of your project is to develop a Unity game called "Fairy Tale World: Magical Journey" that utilizes Unity technology to create an impressive and magical gaming experience for players.

# III. OBJECTIVES

To guarantee the smooth and effective completion of a project employing the Unity Game Engine, the establishment and clear delineation of objectives from the inception is crucial. The project was initiated by constructing and delineating the requisite goals, which aided in understanding what we should and must undertake during its course. Subsequently, objectives were set forth, accompanied by estimated durations for each activity, expressed in days within square brackets.

## 1. Research overview

### **1.1 Activity**

In this endeavor, it is necessary to conduct research and analyses of analogous products, as well as to gain insight into technology pertaining to the development of video games.

* Research similar products on the market *(01/04 - 07/04 | 5 days)*
* Research suitable Vietnamese folk tales *(23/03 - 29/03 | 5 days)*
* Research game development technologies and platforms *(23/03 - 29/03 | 5 days)*

### 1.2 Input

* Vietnamese folk tales
* Similar product reviews
* Information about technology and development platforms

### 1.3 Output

* The volume of knowledge about stories
* List of story candidates for the game
* The advantages and disadvantages of similar products evaluation
* Recommend suitable technology and platform

## 2. Analysis

### 2.1 Activity

Once the groundwork is established in the first objective, the subsequent goal is to assess the pertinent elements for growth. .

* Set development scope *(23/03 - 29/03 | 5 days)*
* Define Gameplay *(23/03 - 29/03 | 5 days)*
* Develop functional requirement list *(23/03 - 29/03 | 5 days)*
* Build a list of non-functional requirements *(23/03 - 29/03 | 5 days)*
* Analyze character and plot *(23/03 - 29/03 | 5 days)*
* Select technology to use *(23/03 - 29/03 | 5 days)*

### 2.2 Input

* Selected story
* The advantages and disadvantages of similar products evaluation.
* Knowledge of development platforms.
* Ideas about goals and gameplay.
* Documentation of game development technology.

### 2.3 Output

* List of functional and non-functional requirements.
* Scope of development.
* Character and plot evaluation.
* Target users and scope of development.
* Requirements for functions, graphics, sounds, effects.

## 3. Design

In this phase, the graphical user interface, audio, and underlying concepts of the Game will be articulated through precise and descriptive designs.

### 3.1 Activity

* Thiết kế nhân vật và môi trường (17/05 - 24/05) (6 days)
* Thiết kế giao diện người dùng (29/04 - 09/05) (8 days)
* Thiết kế cốt truyện hoàn chỉnh (29/04 - 09/05) (8 days)
* Phát triển hiệu ứng âm thanh và âm nhạc (29/04 - 09/05) (8 days)
* Thiết kế sơ đồ chuyển cảnh
* • Character and environment design (May 17 - May 24) (6 days)
* • User interface design (April 29 - May 9) (8 days)
* • Complete plot design (April 29 - May 9) (8 days)
* • Developing sound effects and music (April 29 - May 9) (8 days)
* • Design transition diagrams

### 3.2 Input

* Các nguồn hình ảnh miễn phí.
* Các nguồn âm thanh miễn phí.
* Danh sách yêu cầu chức năng.
* Đánh giá nhân vật và cốt truyện.
* Phần mềm và công cụ tạo nội dung nghệ thuật và hình ảnh
* Hiệu ứng âm thanh và các công cụ và phần mềm tạo nhạc

### 3.3 Output

* Nghệ thuật trò chơi và nội dung hình ảnh.
* Hiệu ứng âm thanh trò chơi và âm nhạc
* Nguyên mẫu trò chơi chức năng tích hợp cơ chế trò chơi, cốt truyện, nhân vật và các yếu tố hình ảnh và âm thanh.
* Cốt truyện hoàn chỉnh.

## 4. Implementation game

### 4.1 Activity

Các hành động sau nhầm đánh giá mức độ hoàn chỉnh của sản phẩm, đánh giá chất lượng của trò chơi và khắc phục mọi lỗi tiềm ẩn.

* Viết mã và lập trình trò chơi dựa trên thiết kế và nguyên mẫu
* Test and debug the game

### 4.2 Input

Design from the “[*Design*](#_3._Design)” objective, ideas, programming tools, graphic libraries, available project source codes, tutorials on the Internet.

* Thiết kế trò chơi và tài liệu nguyên mẫu từ bước trước.
* Môi trường và công cụ phát triển.
* Tutorials on the Internet.
* Available project source codes
* Graphic libraries

### 4.3 Output

* Một trò chơi đầy đủ chức năng đáp ứng các yêu cầu về thiết kế
* Một trò chơi đã được thử nghiệm và sửa lỗi đã sẵn sàng để ra mắt
* Danh sách lỗi và cải tiến

## 5. Evaluation

### 5.1 Activity

Evaluate the completeness of the product, assess the quality of the game, and troubleshoot any potential bugs.

* Thu thập và phân tích phản hồi của người dùng.
* Tối ưu hoá và hoàn thiện game.
* Đánh giá và đưa ra phiên bản cuối cùng.

### 5.2 Input

* Phiên bản Alpha.
* Mẫu đơn phản hồi.
* Phản hồi từ người chơi và tài liệu thiết kế.

### 5.3 Output

* Phiên bản game hoàn thiện.

# IV. LEGAL, SOCIAL, ETHICAL AND PROFESSIONAL

The development of this game project is heavily influenced by various factors, including social, ethical, legal, and professional. These are essential facets that need to be carefully considered to forestall the occurrence of potentially challenging circumstances in the future. The following is a list of specific considerations to consider for each aspect.

## 1. Legal

In this project, the element of law ensures that the project is carried out within the parameters of the applicable laws and regulations. This both ensures that the project is legal and helps to avoid any potential legal risks. It has been recognized that there are potential legal risks associated with the project in question, which are outlined below.

* **Copyright*:*** If incorporating fairytales into the game is chosen, it is essential to ensure accurate attribution to the source and refrain from any copyright breach.
* **Comply with the age limit*:*** It is incumbent upon individuals to adhere to the age restrictions of games aimed at children, adhering to the regulations by applicable authorities.
* **Collection of user information*:*** The collection of personal information of players in the game requires you to comply with the provisions of the law and protect the personal information of users.

## 2. Social

The incorporation of a social element into the project ensures that it is carried out with the approval and backing of the community, thereby leading to its sustainability and helping to mitigate any adverse effects it may have on both the environment and society. Notable aspects to consider when broadcasting a project in a social setting include:

* **Adjusting the content:** When crafting a video game, it is imperative to consider social and moral norms, as well as cultural nuances and values of the associated folk tale, to ensure the game does not transgress any ethical principles.
* **Respect for players:** In the process of crafting a game, it is essential to ensure that users, particularly minors, are treated with respect and that the game does not contain any content that is deemed inappropriate or violent.

## 3. Ethical

Ensuring ethicality in the project's execution guarantees that it is completed in accordance with principles of integrity and morality, while simultaneously avoiding any potential ethical and market-related dilemmas. The ethical implications of the project can be highlighted in the following contexts.

* **Fair use:** It is imperative to ensure that fairy tales are treated fairly, that the story is used only for lawful purposes, and that there is no risk of violating any moral regulations.
* **Do not use sensitive objects:** It is essential to refrain from discussing topics that could be considered offensive, such as race, gender, and religion, while playing the game.

## 4. Professional

This project necessitates the utilization of my professional acumen in order to guarantee that the requisite skills and experience are obtained, thus ensuring the quality of the project and minimizing the possibility of errors in the management and implementation of the project. The following should be taken into consideration:

* **Protect privacy:** As a custodian of your players' information, it is incumbent upon you to guarantee the confidentiality of their data and to abstain from disseminating it to any external entities.
* **Quality assurance:** It is incumbent upon you to guarantee that the game is of the highest possible caliber in order to afford players the most delightful experience achievable when they become involved.
* **Process development:** It is incumbent upon game developers to produce work that is both up to industry standards and in compliance with regulations set forth by the gaming industry.

# V. PLANNING

## 1. Project Management Approach

The project at hand has a variety of Project Management Approaches that can be implemented, however, employing the Scrum approach is deemed to be the most suitable option. According to *(Sliger, 2011)*, SCRUM aims to produce a high-quality software product in the shortest time possible by breaking the development process down into a series of short periods known as Sprints, each scheduled to last approximately one month. (Time-boxes are intervals of time.). Simply put, Scrum is an agile method of iterative and incremental product delivery that uses frequent feedback and collaborative decision making.

The Scrum method is a popular and appropriate choice for a personal project like this one. This is because the project is small in scale and requires flexibility in management. Scrum allows one to take the project focus on the most critical aspects of the project and do it in short sprints. It also allows project implementers to adapt to change and adjust plans if necessary. This will be especially necessary for this project, where it is not technologically warranted.

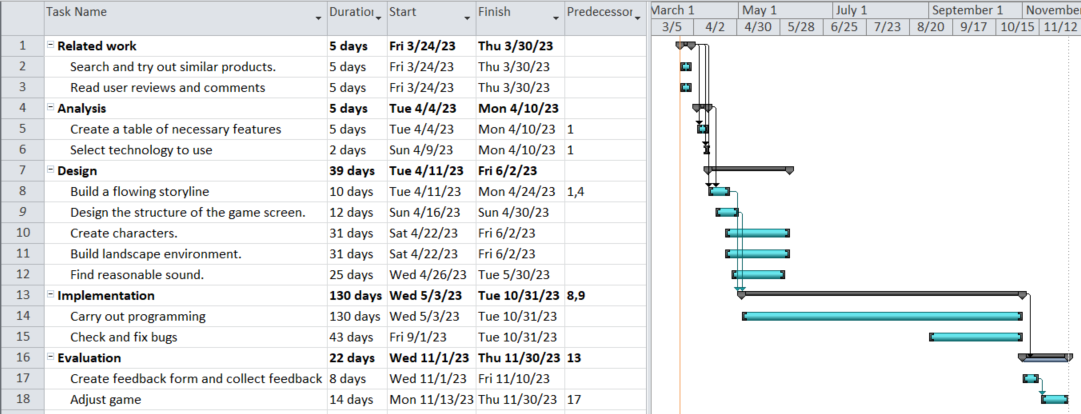
The selection of an appropriate project management technique is contingent upon factors such as the ambit of the project, the duration, the budget, the resources, and the objectives of the individual managing the endeavor. With Scrum, the development process is broken down into short-term loops, which reduces development time and produces the final product faster. That means the burden on budget factors and resources is reduced. Additionally, Scrum focuses on the product and its requested features rather than just completing tasks. This helps the project to be better developed and ensures that the final product meets the original requirements.

## 2. Gantt chart

This should show the schedule of tasks, associated descriptions and mini-deadlines. Remember failure to plan, is planning to fail. It is much harder without a detailed plan – as many students will testify to.

Mid Mar – Nov

Based on the calculated time estimates, the accompanying Gantt chart has been developed. A Gantt chart elucidates the interdependence among actions and multiple activities which can be executed in parallel.



**Figure 1: Gantt chart**

# VI. INITIAL REFERENCES

Sliger, M., 2011. Agile project management with Scrum. *Project Management Institute.*