

## **1. Title page:**

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## **2. Introduction:**

As we know that nowadays most of the games are either combat based or strict follow story-based games. So, we came up with the idea of developing a free roam and exploration-based game.

Raya a Dragon Realm is a Third-person open world game in which the main character has [1] free reign to explore various regions in the "Land of Kumandra". The game has 5 regions that are awaiting to be explored by the lead character.

The 5 regions are named after the parts of dragon named Sisu-

- 1. Fang
- 2. Heart
- 3. Spine

4. Tailon

5. Tail

#### **Classification of Kumandra:**

1. Fang - Colossal Manor which is situated on fang covers almost, most of the land. It uses metallic stylized graphics and is the most beautiful building in Kumandra. As the building is huge and covers allot of area so it has suitable space in which all the people of it live inside it.

2. Heart - It is a small island covered by Sisu river. The lead character's Mansion is located on top of [2] obelisk which is covered by mountainous lush forest in the middle of Heart.

3. Spine - The land is covered by tundra vegetation. It is rich in Figid Bamboo Forest covered by snow on them.

4. Tailon - It is a Japanese floating market famous for dealing resources. At the back side of the market a Dark Haunted Forest is located.

5. Tail - It is a barren desert land. This region is filled with Canyon.

The game offers a 3D stylized open world environment which focuses on natural beauty. Everyone can savour and feel virtual nature by playing this game.

### **3.Previous work:**

In the gaming industry where most of the open world games have quests, storyline, combat scenes, aggressive abilities, etc. which makes the players focussed on completing quests and completion of main story missions rather than savouring the elements of an open world platform such as virtual nature,

soothing music tune, and many more. For example – [3] GenshinImpact, [4]Albion online, [5]GTA V, [6]Kena, etc.

So, our goal is to develop a game in which the user can enter any region and explore it as per their wish. As there are no quests and missions; the player can interact with the elements of game.

#### **4.Problem Statement:**

##### **1. Lack of Focus in Gameplay**

We have seen many players and new ones, entering in the gaming field wanting to enjoy the game and explore elements in it. But due to some difficult to accomplish hard missions does not allow them to reach next region or next phase, which leaves the game with unexplored regions and elements. And they cannot focus on the elements of game instead focuses on completing missions

Our game Raya, will be created to have a focused gameplay towards the elements in the environment. Now the player can savour most of the elements and enjoy the game.

##### **2. Lack of Creativity in Gameplay**

Some open world games are created simply by looking at other open world games and copying the gameplay mechanics of those games. In recent years, open world games generally have a formula: the player is introduced to the world and then the player is told to unlock areas of the map, gradually encountering more difficult enemies.

It is not mandatory to set quests to unlock a new region or gain experience to explore other lands. Nowadays most of the open world game developer just focuses on graphics quality or interactive missions. And because of that we are here to develop a totally different style game mechanism where we are focusing on graphics and also in the players gameplay interest also.

### **3. Running errands for everyone**

Many open-world games follow a similar structure. You need something from a certain NPC, who only agrees to it if you do them a favour. It has been used countless times and has not gone away. Even of 2019's best games, The Outer Worlds is very guilty of this.

We think that the developer should develop a game where the player can do whatever they want to enjoy the virtual world, unlike wasting times in completing the side missions to upgrade their level. We are not adding the side tasks which is given by the NPC characters just to increase the lead characters charisma or game level

### **4. Difficulty in completing missions**

Missions in open-world games are sometimes hard to complete too. And sometimes players are unable to explore the next level due to incompleteness of the mission which results in unable to reach the next phase and next region. Some missions are time limited which makes it even harder to complete the mission and that within given time.

We are not adding any quests or side quests which makes the game enjoyable and the player can explore each region.

### **5. Objective:**

Our objective is to make the player feel good and make him less stressful so he/she does not pressurise the brain which may lead in headache or any other issues. In these days people are more likely to get frustrated easily and get out of control by playing hard level-based games and also day to day life affects one's morale too. So, to make them calm down and just focus on improving their moral we are trying our best to achieve this.

## **6. Methodology:**

**Initiation (requirements specification):** As we are building an open-world game where every user can enjoy the game by experiencing the features in it such as vegetation, music, easy controls, etc.

**Planning and design:** As project planning and designing are an early phase of project life-cycle. So, we found out how the project designing and planning can stream-line our team's efficiency by the following: -

- 1) Our plan for building this project is to create awareness among all the gamers and non-gamers that a normal game can be fun to play and non-addictive as it does not affect your day-to-day life in a bad way.**
- 2) As we are not using any paid software and assets it is challenging to allocate the suitable assets and software in building the game as we wish.**
- 3) As we are a group of three members there is separation of division of work where, one is handling the designing, second one is building the code and the third one is assisting in both the fields in development of the game.**
- 4) Our goal is to provide this game to as many people all around the world in making them aware that a normal game can be interesting and fun to play without any additional features.**
- 5) Our strategy is to use pre-resources for building the project as we are beginners in this field and the project completion estimation date is 20th of July.**

**Control and Execution:** We are trying our best to build the code as simple as possible, so it is easy to explain the code to other members of the group. We will be building, designing, and testing the game in our sample file before adding in our final product.

## **7. [7] Future Work:**

- 1. After the initial release, we may look to expand game's world by adding new areas which will help in keeping the players engaged and excited about the game, as well as attract new players.**
- 2. Multiplayer games are hugely popular and offer a great way for players to compete against each other or work together to achieve goals. We could add this functionality to our game, allowing players to connect and play together online.**
- 3. We could also look to add new characters or abilities to the game, giving players more variety and choice when it comes to gameplay. This could also help to keep the game feeling fresh and exciting.**
- 4. As technology advances, we may want to update the game to take advantage of new hardware or software. This could involve improving graphics, enhancing performance, or adding new features that take advantage of the latest technology.**

## **8. Conclusion:**

**In conclusion, we found that game development is challenging and very exciting process that involves various stages such as ideation, design, programming, and testing. It requires a team of individuals with diverse skills and expertise to collaborate and bring their ideas to life. The [8] success of a game depends on several factors such as the game design, quality of graphics and sound, gameplay mechanics, and overall user experience. Every game developer needs to have a firm grasp of market trends, target audience, and the latest technologies to create engaging and immersive games. Overall, game development is a dynamic and rewarding field which continues to evolve as new technologies and trends emerge, and it offers ample opportunities for game developers to showcase their creativity and skill.**

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