

WordVenture

Kasturi Tomake, Satvika Bidkar, Om Rajput, Tanvi Pachwadekar, Shubhangi Patil

Kasturi G. Tomake(student), computer science and engg., Sanjay Ghodawat Institute

Satvika S. Bidkar(student), computer science and engg., Sanjay Ghodawat Institute

Om A. Rajput(student), computer science and engg., Sanjay Ghodawat Institute

Tanvi S. Pachwadekar (student), computer science and engg., Sanjay Ghodawat Institute

Guide: Mrs. Shubhangi T. Patil (lecturer), computer science and engg., Sanjay Ghodawat Institute

Abstract –

WordVenture is a children's game application that contains fun and educational aspects within a secure and engaging setting. In the game, children can travel through various environmental places, it enhances their problem-solving skills, boosts creative thinking, and improves memory retention. The gaming application is easy for children to use, allowing them to play the game effortlessly. The game includes tasks such as collecting scattered letters, solving word puzzles, and engaging with educational elements and characters across progressive modules. It helps build critical thinking skills and makes learning informative and enjoyable. Word Venture is an offline game, allowing children to save on internet usage, which is one of the key features of the Word Venture game.

1.INTRODUCTION

WordVenture is a wonderful concept of a game implemented by our team. It is an innovative game where all users can be entertained simultaneously, and it consists of educational content. The game is helpful for children aged 7 to 9. WordVenture integrates educational tools like words created by characters that are hidden in various pictures. This feature excites children about game. The game presents various challenges to promote their thinking power.

WordVenture aims to provide a platform where today's kids can learn educational concepts while enjoying engaging with good platform. The game incorporates four modules and language elements, encapsulating

these aspects. It encourages children to imagine what will be the next word in next module and helps them learning various word.

WordVenture includes features like finding characters in different solving puzzles, earning small rewards, and progressing through modules. One of the most important features is that the game does not require an internet connection; it is an offline game. Ultimately, the game presents challenges that enhance thinking skills, retention, creativity, and problem-solving in an enjoyable manner.

2.Review of Literature

2.1 Study of Existing System

Today's children are often absorbed in games like PUBG and Free Fire, which can lead to neglecting homework and may affect their mental skills. However, Word Venture provides an interface where they can virtually explore things while integrating educational content. The game has specific time limits for every module, helping to control screen time. This way, addiction can become a positive activity.

In some tutorials, there are boring instructions that cause children to lose interest. But in this game, there are no instructions that make children bored. While other games lack educational content, Word Venture includes elements that help kids learn various words. Other games can be difficult for children to use, but

this one is user-friendly. Additionally, about 75% of games are online, where kids might randomly click on ads or make purchases. In contrast, this game is offline and does not require internet access.

2.2 Findings from Literature Review

Wordventure is the effective gaming idea that promotes the kids thinking ability and vehicles, fruits, animals, vegetable these modules promotes them to think about the words . It is the challenge to keeping the content updated and ensuring accurate cultural representation to maintain the correct app GUI.

2.3 Problem statement

WordVenture's key aim is to develop a game that has user-friendly gameplay, a user interface, and educational value, ensuring fun, interactive content and learning in an entertaining environment that improves children's love for words. Many kids are wasting time playing games that are not useful for them, especially since they are often online games. This can lead to internet dependency and exposure to harmful content. In contrast, WordVenture integrates educational content within a fun environment.

2.4 Project Scope

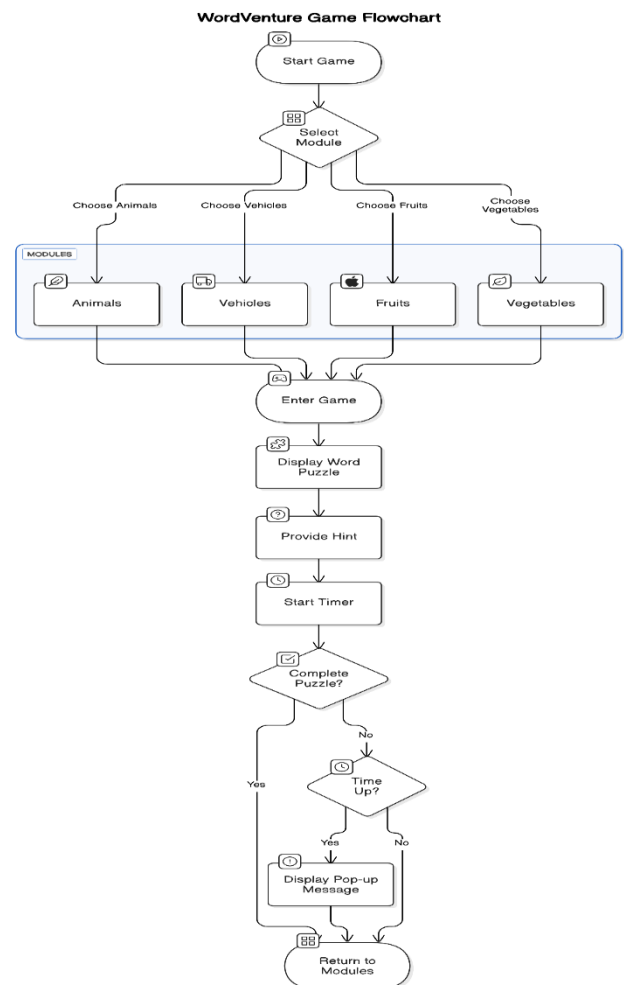
The WordVenture kids game project is an approach to creation and development of a learning video gaming platform for children aged 7–9. One of the key features of this tool will be interactive puzzle, and challenge. The project will also focus on a visually stunning and user-friendly UI for children, making navigation as easy and playable without any trouble to go through. In addition, the game will reward players with in-game loot as they continue to learn. Multi-platform, including mobile phones and tablets as well as desktop.

3.Objectives of Proposed System

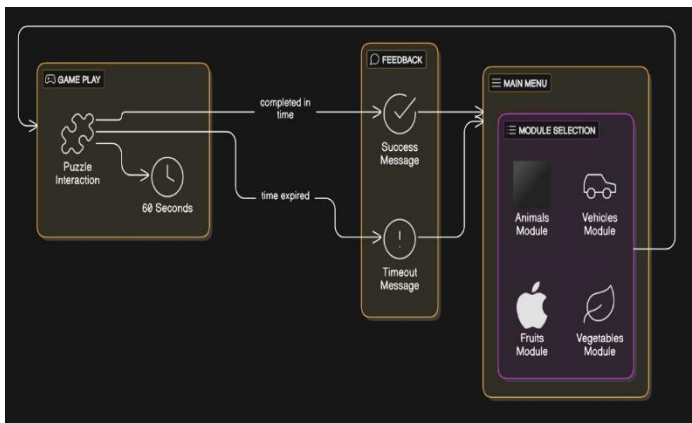
Blending educational resources, it provides elements like language lessons that are smoothly incorporated into the game. Cultural exploration can create an interactive platform that allows children to learn about languages. User engagement is achieved by designing quests, challenges, and puzzles to stimulate interest and maintain player focus while enhancing learning. The child-friendly interface is easy to use, making it accessible to children aged 7-9. It has a progressive learning system, which is a reward-based system that encourages consistency in learning by offering motivation for completing educational tasks.

4. Methodology

4.1 Flowchart



4.2 Architecture



4.3 Modules of Software System

Gameplay: The users advance through a sequential narrative complemented by movement across different territories and solving letter puzzles in the process.

Mechanics: Every territory has specific vocabulary sets (e.g. teachers or any other professions, environments etc).

Narrative: Each realm of activity could be related to the broader story and the participants including quests and storytelling.

5.Requirements

5.1Software Requirements

5.1.1 Frontend

- Flutter
- java
- xml

5.1.2 Backend

- MongoDB
- MySQL

5.2 Hardware Requirements

- Desktop
- RAM: at least 16 GB
- Storage at least 256 GB of space
- Processor: at least 4 core
- Resolution: at least 1920 x 1080
- Ports a couple available for controller or at least a USB hub

6.Application of proposed System

The proposed system for wordVenture kids game is designed for enhancing the ability of the children like creativity, problem solving skills etc. game encapsulate the educational elements that makes game useful for them. Key feature is that kids can play and learn the various words. The system gives secure and user friendly platform to user(kids). It has reward system and content which is interactive. It is offline game and promotes the creativity, global awareness, thinking , problem solving skills.

- 1) Offline accessibility : user can play game without internet.
- 2) Educational integration : it has integrated educational content like finding word.
- 3) Gamification of learning : it has reward system that motivates the user and increase the interest of the user in the.

7.Advantages and Disadvantages

7.1 Advantages

1. While having fun: Children can acquire knowledge in areas such as problem solving through fun-filled games.
2. Development in reasoning ability: Children are able to think and even reason, as they have to think on the challenges given to

them. Communication with the clients.

3. Enhanced coordination: When using games that entail touch and movement enhance the hand eye coordination. Patent Lawyers.
4. Development of artistic abilities: Games can be helpful in some cases where you want your child to think outside the box.
5. Non virtual translators Realization of the problem shuffling the focus from textual activities to answering casual questions.

7.2 Disadvantages

1. Can Be Addictive: Kids might want to play all the time, ignoring home work or other important tasks. Initial Learning Curve.
2. Less Face-to-Face Play: Playing games can mean less time spent playing with friends in person.

8. Conclusion and Future work

In conclusion , the WordVenture game includes the interactive and challenging game play , which enhance there IQ ,creative thinking , improve the memory and retention, problem solving skills , critical thinking. Game consist the useful educational elements that are integrated in various things , it has powerful graphics which makes game enjoyable, motivating and make user interested in the game with this game enhance there children's word dictionary . We focused on providing a platform which is user friendly and it gives kids fun with education. We provide a interface where they can learn a new word by finding the missing characters and completing filling blanks. We made a specific time limit to every level it helps us to control there screen time.

9. Bibliography

- <https://www.devto.dev.com/education/articles/en/506/20-best-books-for-game-designers>:
- <https://gamingthepast.net/theory-practice/bibliography>
- <https://www.goodreads.com/book/show/18977761-game-development>
- Aslan, Serdar, and Osman Balci. "GAMED: digital educational game development methodology." SIMULATION 91, no. 4 (March 2, 2015): 307-19.
<http://dx.doi.org/10.1177/0037549715572673>.
- DEPIETRO, PETER "DEVELOPMENT ESSENTIALS: GAME STORY AND CHARACTER DEVELOPMENT AND DEVELOPING SERIOUS GAMES." Art Book 14, no. 1 (February 2007): 70-71.
<http://dx.doi.org/10.1111/j.1467-8357.2007.007832.x>.