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SYNOPSIS Presentation

on

Little Tales

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Introduction

Little Tales is an interactive, AI-powered kids' story creation web application designed to spark creativity and make storytelling fun, personalized, and educational.

Using the **Gemini API**, the app allows children (and parents) to create unique stories by selecting **characters, themes, and genres**. It enhances the reading experience with **speech synthesis**, **beautiful visuals**, and **PDF download options**.

- The platform aims to:
- Encourage creativity and imagination in children.
- Provide engaging, safe, and personalized story content.
- Leverage AI to generate high-quality, age-appropriate narratives instantly.

Literature Review

•**Importance of Storytelling** – Storytelling enhances creativity, language skills, and emotional intelligence in children, as supported by Vygotsky's *Zone of Proximal Development (ZPD)* theory.

•**Limitations of Traditional Methods** – Conventional storytelling often lacks inclusivity, engagement, and interactivity, reducing its learning effectiveness.

•**AI Integration in Storytelling** – Combining gamification and adaptive learning makes stories more interactive and personalized for diverse learners viable solution aligned with **UN SDG 4: Quality Education**.

Literature Review (Contd.)

•**Gap in Existing Platforms** – Current apps like *Epic!* and *Storyberries* offer digital story libraries but lack AI-driven personalization and accessibility features.

•**Market & Feasibility** – With EdTech projected to reach $404B by 2025, using Java with AI tools (OpenAI GPT, Google Gemini) ensures a scalable, accessible, and commercially feasible market.

Objective of the Project

This project aims to develop an **AI-powered interactive storytelling web app** using **HTML, CSS, MongoDB, and Google Gemini API** to enhance creativity, engagement, and accessibility for children. The platform will feature a **MongoDB backend** for authentication and storage, **AI-generated narratives** using the Gemini API, and a modern responsive **UI** for a seamless experience.

Key Goals:

- **Personalized storytelling** with AI-generated narratives based on user-selected themes, characters, and genres.
- **Accessibility features** like text-to-speech narration and multimedia story presentation for inclusivity.
- **Offline access** with downloadable **PDF story versions** for easy sharing and reading anywhere.

By leveraging **modern web technologies and AI**, this project ensures an **engaging, scalable, and inclusive storytelling platform** for children.

Technology (Hardware Requirements)

- **User Devices:** Tablets or smartphones (Android/iOS) with touch-screen support for interactive storytelling.

Laptops or desktops for progress tracking and content customization.

- **Assistive Technology Integration**: Support for screen readers and speech-to-text tools.

Technology (Software Requirements)

Programming Languages & Frameworks:

- HTML,CSS,Javascript – Front-end for web apps.
- Node.js-Backend implementation.

Database:

MongoDB – Flexible user data storage.

AI & Accessibility Tools:

- **Gemini API (Google AI)** – AI-powered story generation and personalization.
- **Web Speech API** – For speech synthesis (text-to-speech) to narrate stories.

Modules

1. Authentication & User Management:

- Implement authentication to enable login via Email.
- Manage user sessions securely.

2. User/Parent Dashboard:

- Display all stories created by the logged-in user.
- Provide a quick access panel to create new stories or explore existing ones.

Modules

3. Story Creation Module:

- User inputs keywords such as:
  - Subject of the story
  - Story type (Adventure, Fantasy, Moral, etc.)
  - Target age group
  - Image style (AI-generated or predefined)
- AI generates the story with both text and audio narration options.

4. Story Exploration Module:

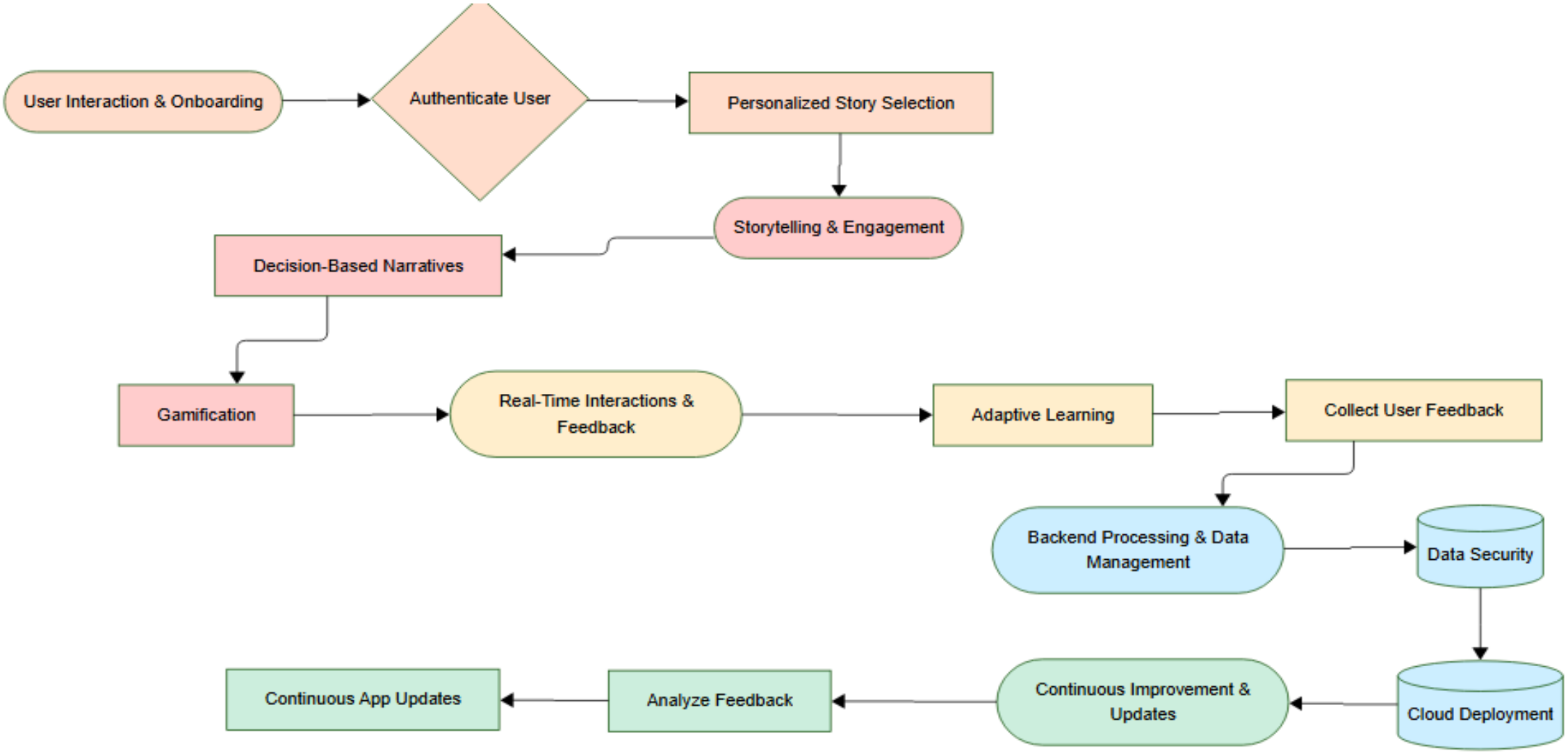
- Browse a collection of user-generated stories.
- Filter by category, age group, popularity, or newest uploads.
- Option to like, save, or share stories.

Modules

6. Accessibility Features:

- Read Aloud Mode for listening to stories.
- Text-to-Speech customization (voice selection, speed adjustment)
- Dark Mode/High Contrast Mode for better readability.

Project Workflow

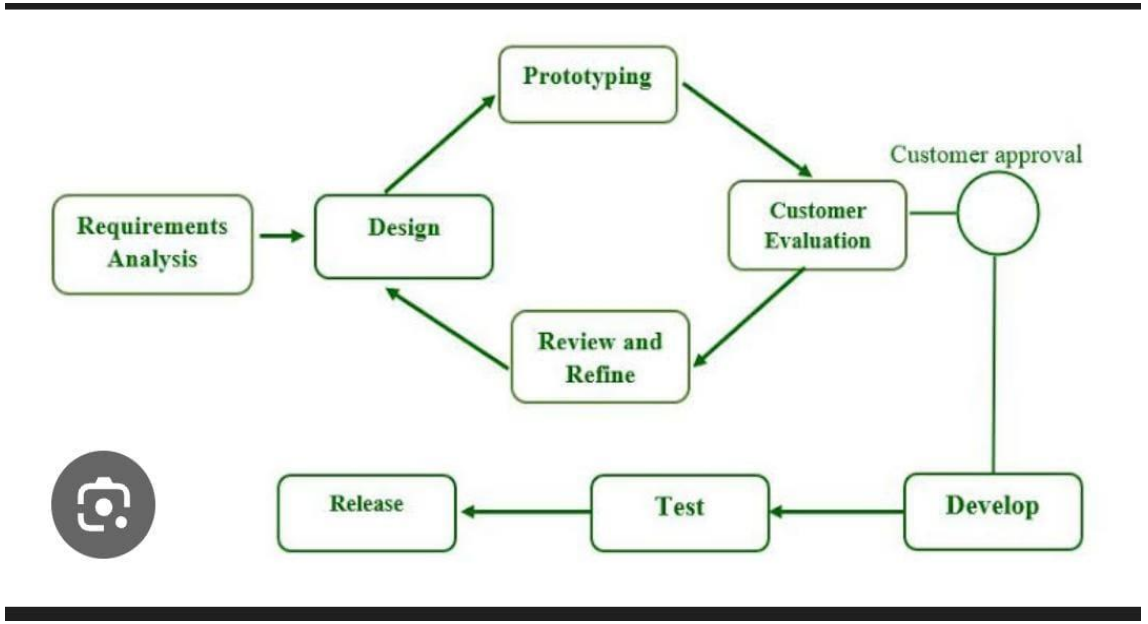


Development Methodology

- **User-Centered Design:**

Conducting user research (focus groups, interviews)
Iterative testing and refinement based on feedback

- **Prototype Workflow:**



Future Enhancements

- **AI-Driven Personalization:** Adaptive learning based on user progress
- **Multilingual Support:** Expanding accessibility for diverse linguistic backgrounds
- **AR/VR Integration:** Immersive storytelling experiences
- **Community Features:** Allowing children to create and share their own stories