Project Road Map
Team TA30

THEME

Learning about Bushfire

Preparing for Bushfire

Recovery From Bushfire

Gamification

EPICS

Epic 1: Understanding Bushfire Causes

Epic 2: Interactive Analytics Dashboard

Epic 3: Recognizing Bushfire Risks and Seasons

Epic 4: Survival Skills and Getting Help

Epic 5: Recovering : Personal Stories

Epic 6: Community Recovery .

Epic 7: Quizzes and Games

Epic 8: Badges and performance measuring

FEATURES

Parent and Teacher user guide

1. Development of comprehensive guides for parents and teachers to aid in bushfire education. This includes step-by-step instructions and best practices.

Bushfire History:

1. **Interactive Timeline:** Shows major bushfire over the past 20 years in a child-friendly format.

2. **Easy-to-understand summaries** for children aged 8-11 years.

3. **Visually Engaging:** Designed to be appealing and interactive for a better learning experience.

Bushfire Causes:

1. An animated sequence that visually explains how hot temperatures, dry conditions, and strong winds contribute to bushfires.

2. The animation should include simple, child-friendly language and visual cues.

3. Character tutors , interactivity to click on elements to learn about causes of bushfires

Bushfire Impact:

1. Engaging, colorful infographic showing the impact on animals during the 2019-2020 bushfires.2

2. Provides short, child-friendly explanations for easy understanding.

Interactive learning and though provoking questions:

• **Exploring Trends:** Animated map showing bushfire occurrences from 1927 to 2023 and bar graph for comparison across time

• **Understanding Risk Levels:** Bubble graph showing at-risk schools with varying sizes.

• **Visualizing School Risk:** Interactive visualization with clear labels for number of school by risk level.

Seasonal Bushfire Variation Bar Chart

1. **Bar Chart:** Shows seasonal variation in bushfire incidents over the years.
2. **Interactive Features:** Allows children to explore and interact with the data.
3. **Dual Versions:** Provides standard and colorblind-friendly versions for accessibility.

Interactive Bushfire Severity Map

• **Interactive Map:** Displays bushfire severity across Victoria with school locations overlaid.

• **Search and Select:** Allows children to type their school name or select from a dropdown list.

• **Damage Polygon:** Highlights areas affected by bushfire damage.

• **History summary:** Provides information on past bushfire damage in affected areas.

Bushfire Danger Rating for Schools

1. **Risk Rating Display**: Show current fire danger ratings for schools based on bushfire data.
2. **Data Integration**: Use both historical and real-time data for accurate risk assessments.
3. **Preparedness Support**: Aid schools in understanding and preparing for bushfire risks.

Bushfire Survival Flowchart and Emergency Help

• **Flowchart Design:** Create a cartoon-style flowchart to explain essential bushfire survival skills.

• **Character Integration:** Use Australian animal characters to guide children through the survival steps.

• **Emergency Help Interface:** Develop an interactive interface where characters provide voice-guided instructions for seeking help during an emergency.

Feature 6.1: Community Forum

Resource Directory: List local support services, rebuilding resources, and emergency contacts.
Community Forums: Create spaces for residents to share experiences, advice, and recovery tips.

Feature 5.1: Digital comic book (Audio Book)

• **Recovery Stories:** Brief real-life experiences.
• **Support Resources:** Quick access to emotional help.
• **Tips:** Actionable recovery advice.
• **Interactive:** Engaging activities or quizzes.
• **Visuals:** Colorful graphics and animations.

Feature 7.1: Quizzes and Games

• **Scenario-Based Quizzes:** Create quizzes based on real-life bushfire scenarios, focusing on safety, response, and recovery.
• **Interactive Games:** Develop games that simulate bushfire situations, including tasks like creating and implementing an emergency plan.
• **Emergency Plan Preparation:** Design challenges where users create and customize their own emergency plans, including evacuation routes and safety kits.

Feature 8.1: Achievements

• **Achievement Badges:** Implement a badge system to reward progress and performance, such as "Bushfire Safety Expert" or "Emergency Planner."
• **Performance Metrics:** Track quiz scores, game achievements, and emergency plan effectiveness to measure and display user performance.

Feature 8.2: **Machine Learning Weather-Based Bushfire Simulator**

• Offers a dynamic, hands-on way for children to understand bushfire development factors.