Team Details

a. **Team name: GLOBE TROTTERS**
b. **Team leader name: K.V.Navaneeth Reddy**
c. **Problem Statement: GLOBE PROTOCOL GAMES**

Brief about the idea

GLOBE Introduction:

- The Global Learning and Observations to Benefit the Environment (GLOBE) Program is a worldwide science and education initiative.
- It empowers students to investigate their local environment and contribute to global scientific research.

Idea Overview :

- Our game, **GLOBE Quest**, aims to make learning about environmental issues engaging and fun for students.
- The game will feature interactive storytelling, challenges based on GLOBE protocols, and competitive gameplay.
- Students will form teams within their schools, with teams based on interests, academic abilities, or classroom groupings.

- Teams will work together to collect data about their local environment and learn about various environmental topics.
- By playing GLOBE Quest, students will develop a deeper understanding of the world around them and become more environmentally aware
- The game will offer multiple levels of difficulty, allowing students to progress at their own pace.
- Teams will compete with each other to earn points and advance through the game.
- The game's interactive nature will make learning a rewarding and enjoyable experience.
- By integrating GLOBE protocols, GLOBE Quest will provide students with valuable scientific knowledge and skills.

Opportunities

a. How different is it from any of the other existing ideas?

- GLOBE Quest uniquely combines interactive storytelling, competitive gameplay, and GLOBE protocols to create a comprehensive and engaging learning experience.
- Unlike many educational games, GLOBE Quest focuses on real-world environmental issues and provides students with opportunities to contribute to scientific research.

b.How will it be able to solve the problem?

- By making learning about environmental issues fun and engaging, GLOBE Quest can motivate students to take an interest in science and environmental conservation.
- The game's competitive nature can foster teamwork, problem-solving, and critical thinking skills, which are essential for addressing environmental challenges.

c.USP of the proposed solution

- GLOBE Quest's unique blend of education, entertainment, and scientific research sets it apart from other educational games.
- The game's ability to inspire students to become active participants in environmental conservation and foster a sense of school-level competition is a key USP.

List of features offered by the solution

- **Interactive Storytelling**

Students will immerse themselves in a captivating narrative that explores environmental themes.

- **Competitive Gameplay**

Students will compete with other schools and earn points to climb the leaderboard.

- **GLOBE-Based Challenges**

Students will learn about environmental issues and collect data using GLOBE protocols.

- **Educational Resources**

Students will have access to a variety of educational materials and resources to enhance their learning.

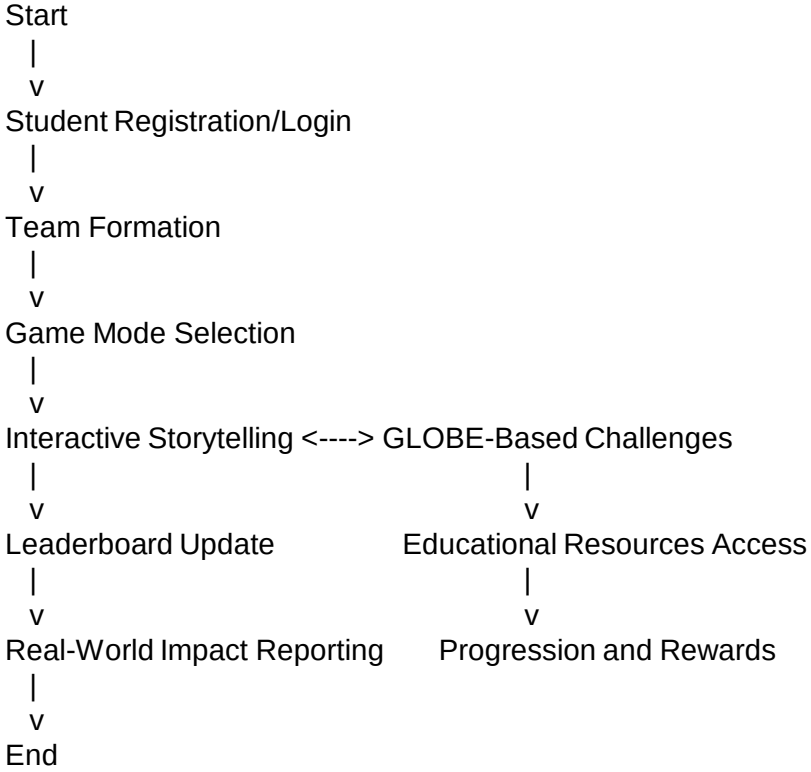
- **Team Collaboration**

Students will work with their classmates to solve puzzles and complete challenges.

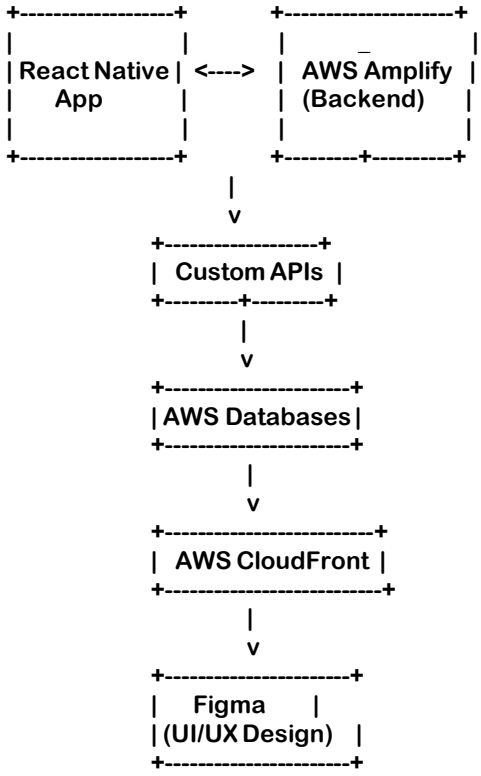
- **Real-World Impact**

Students will contribute to scientific research and make a positive impact on the environment.

Process flow diagram or Use-case diagram



Architecture diagram of the proposed solution



Technologies to be used in the solution

AWS CloudFront

Enhance performance by delivering game assets quickly to users globally.

AWS Amplify

To provide the backend infrastructure for managing user data, real-time interactions, and integrations.

HTML, CSS, and JavaScript

Will be essential for developing any web-based components or integrating interactive features into the game.

React Native

To create a seamless mobile experience, expanding the game's reach to users on different devices.

Figma

Will be used throughout the design process to create engaging and intuitive user interfaces for both the web and mobile versions of the game.

Additional Details/Future Development (if any)

➢Expanded Educational Content

1. **Additional Environmental Topics**: Continuously update the game with new environmental topics and challenges to keep the content fresh and relevant.

➢Augmented Reality (AR) and Virtual Reality (VR)

1. **AR Integration**: Incorporate AR features to allow students to interact with environmental data and game elements in their real-world environment through their mobile devices.
2. **VR Experiences**: Develop VR experiences that immerse students in different environmental settings or scenarios, providing a more engaging and interactive learning experience.

➢AI and Machine Learning

1. **Personalized Learning Paths**: Use AI to create personalized learning paths and recommendations based on students' progress, interests, and performance.

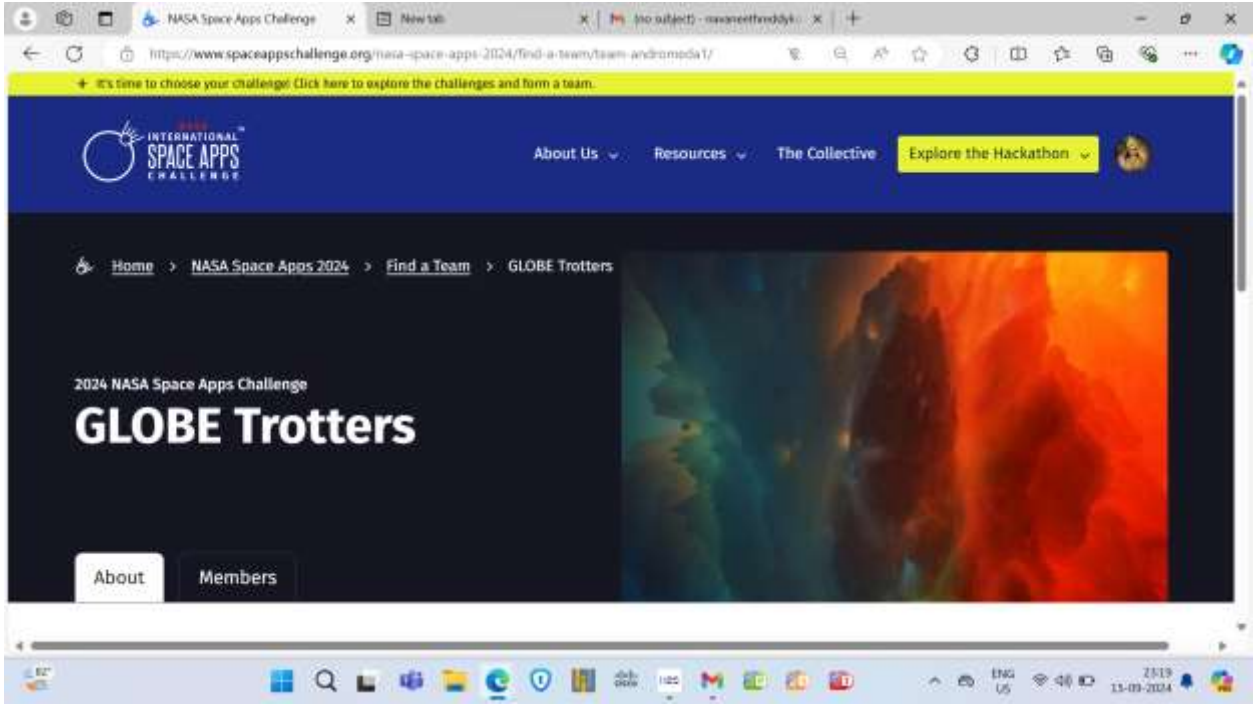
➢Sustainable Development and Real-World Impact

1. **Partnerships with Environmental Organizations**: Collaborate with environmental NGOs and research organizations to provide students with real-world data and insights, enhancing the impact of their contributions.

Video presentation link :
https://drive.google.com/drive/folders/1Ba6XtzqM7U2ZSpR_dcurb5Ep7eVrBl9_?usp=drive_link

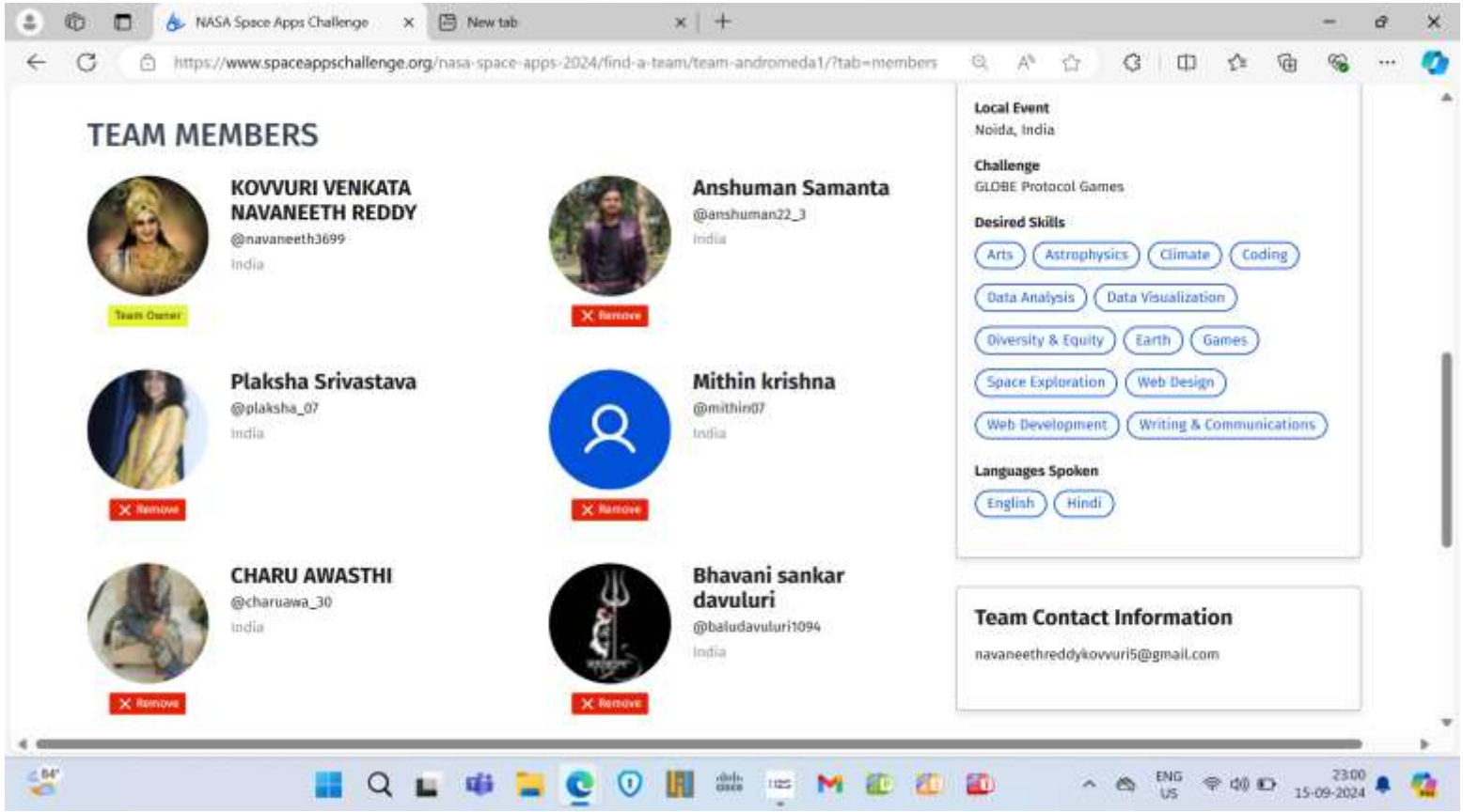
Git hub repository link : https://github.com/bhavanisankardavuluri10/NASA_SPACE_APPS_CHALLANGE

Proof of Registration on https://www.spaceappschallenge.org/nasa-space-apps-2024/2024-local-events/noida



NASA Space Apps Noida 2024

Innovation partner



NASA SPACE APPS NOIDA

Innovation partner H2S

NASA Space Apps Noida 2024

World's Largest Space & Science Hackathon

Thank You