



## Web3Bridge Cohort XIV Pre-Qualification Exercise

### Instructions:

1. All questions must be answered using JavaScript. You are at liberty to use a framework of your choice, or use vanilla JavaScript
2. All answers must be submitted using your GitHub account. The link to submit your code project will be shared in a separate form that will be shared with you.
3. Please ensure to demonstrate some git workflow skills, i.e, branching, pull request management
4. Host a version of your solution using GitHub Pages, Vercel, etc. Use the documentation below for guidance:  
<https://docs.github.com/en/pages/getting-started-with-github-pages/creating-a-github-pages-site>
5. Adding tests for your code submission will be a plus and will give you an edge over other participants.
6. Your final commit to your GitHub repository should not be later than **2 Hours**. All commits after that will be ignored, and evaluation will be done without them

### Question

12 students have proposed forming a savings group. Their goal is to collectively invest their savings in a Play-to-Earn blockchain game that yields a 20% return on the total invested amount per gameplay.

The savings group has three tiers:

- Tier 1: 10,000 Naira (5% interest per week)
- Tier 2: 20,000 Naira (10% interest per week)
- Tier 3: 30,000 Naira (20% interest per week)

### Requirements:

Using HTML, CSS, and JavaScript or any JavaScript framework of your choice, design a savings group web application with the following features:

1. Student Registration:
  - a. Allow each student to enter their name and select a savings tier.

- b. Display their weekly interest and the total amount they would withdraw at the end of the week.
2. Savings Dashboard:
  - a. Display the total amount saved by all members and a detailed breakdown of each member's contribution and accumulated interest.
3. Tier Validation:
  - a. Ensure each student selects the correct amount for their chosen tier (e.g., Tier 1 should only accept 10,000 Naira).
4. Withdrawal and Membership Management:
  - a. Simulate weekly progress and allow a student to withdraw their funds, which should:
    - i. Remove them from the group,
    - ii. Update the total savings,
    - iii. Allow another student to join in their place.

Challenge: Implement the app with a clean, user-friendly interface that validates inputs and dynamically updates totals and interests based on the selected tier and withdrawal actions.

**NOTE:**

- Include a detailed README that explains how to use the savings web app
- Using TypeScript or React.js is a plus