Project 1: User Requirements Document - Jackson Jacobson

User Identification

Primary Users:

- **Instructors/Lecturers** – use the app to pose real-time questions during class, gather live feedback, and assess understanding of key concepts.
- **Students** – respond to polls via their personal devices (laptops, tablets, or smartphones) during live sessions.

Secondary Users:

- **Teaching Assistants (TAs)** – assist with administering polls, interpreting results, and helping students engage with the tool.
- **Administrators or Curriculum Designers** – may use the tool in pilot studies or professional development workshops to improve instructional deliver

Key User Needs / Problems to Address

1. **Increased Student Engagement:** Many students are hesitant to speak up in class, especially in large or hybrid classrooms. A polling app provides a low-pressure way for them to participate.
2. **Instant Feedback on Comprehension:** Instructors need a quick way to gauge which topics students are struggling with in real time so they can adjust their lesson pace or revisit concepts.
3. **Inclusive Participation:** Students who may be shy, neurodivergent, or non-native English speakers often avoid raising hands or speaking. The app provides an anonymous and accessible outlet for them to engage.
4. **Visual Summary of Results:** Both instructors and students benefit from seeing results displayed clearly with bar graphs or pie charts to understand trends in understanding.

5. **Simple and Low-Barrier Use:** Many polling tools require account creation, complicated setups, or internet login barriers. This app runs entirely in-browser, making it quick to deploy in class without training.

Success Criteria (From the User's Perspective)

The Classroom Polling App will be considered successful if:

- Students can **submit their vote in under 30 seconds** with no technical issues.
- Results **update instantly** and are easy to understand visually.
- The app can **function offline or without registration** (if needed) and keep results displayed on page refreshes.
- Instructors can easily **reset polls or rerun questions** across different sessions.
- The app **works across devices and browsers**, with responsive design and mobile support.

Constraints and Limitations

- **Local Device Storage Only:** Votes are stored in the browser's localStorage. This means data is **not shared across devices or users**, limiting collaborative or remote polling capabilities.
- **No Authentication or Access Control:** The app does not currently restrict multiple submissions by different users on the same device. While vote re-submission is limited within the session, one device can only represent one user unless extended with logins.
- **Lack of Instructor Poll Management Panel:** There is no backend or dashboard for managing multiple questions, saving past poll data, or exporting results. Each poll is static and must be manually reset.
- **Not Optimized for Very Large Classes:**
  Since it runs locally in-browser and doesn't sync data across users, it's best suited for **small- to medium-sized classrooms**, one device per person.
- **Requires Basic Tech Comfort:**
  While easy to use, instructors must be comfortable launching a browser-based app and optionally running a local server (for enhanced file permissions and access).