Summary of Implemented Features

1. Recover Account Credentials

This feature allows users to securely reset their password or username if forgotten. The process involves:
- Email Verification: Users must enter their registered email, and a one-time verification code (OTP) is generated and "sent" (simulated in development).
- Secure Reset:
  - Passwords must meet strict criteria (8+ characters, at least 1 number, 1 uppercase letter, no spaces).
  - Usernames are checked for uniqueness to prevent duplicates.
- Validation & Security:
  - All password changes are stored as SHA-256 hashes (never plaintext).

This ensures that only legitimate users can reset credentials while maintaining security.

2. User Settings & Data Persistence

To prevent loss of progress, user data is permanently stored in two ways:
- Account Information: Saved in accounts.csv in the format (*username, hashed_password, email*)
  - Passwords are securely hashed before storage.
  - Usernames and emails are preserved for login and recovery.
- Game Statistics: Wins, losses, and performance metrics are stored on a remote server (not shown in code but designed for scalability).
  - Stats are displayed on leaderboards, ensuring persistence across sessions.

This guarantees that user settings and progress are never lost, even after logging out.

Why These Features Matter

- Recover Account Credentials → Restores access securely without compromising accounts.
- User Settings Saved → Ensures stats and preferences are retained long-term.

Both features were added in response to the feature proposal, fulfilling core requirements for a reliable user experience.

Future Improvements
- Replace OTP simulation with real email services.
- Migrate from CSV to a database for better scalability.
- Add logging for security audits.