## Use Cases and Sequence Diagrams Group 5 - Adila Biswas, Brina Chahal, Ethan Trant, Shefat Rahman, Zeba Karobi

## 1) Use Case:

**Actors:** User, Password Generator System (PGS)

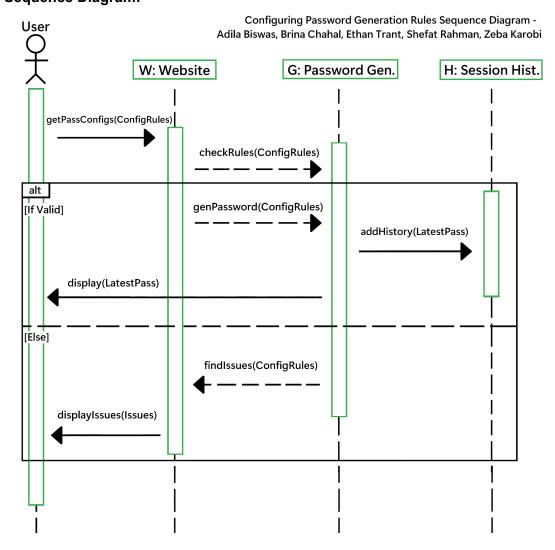
**Description:** The user configures their desired password settings, including length or a range of lengths (min. 8 - max. 24 characters), the inclusion of uppercase and/or lowercase letters, numbers, and special characters. The system generates a password that adheres to these settings.

**Data:** User-selected password criteria (length, character inclusion settings)

**Stimulus:** User selects desired settings and presses the "Generate Password" button.

**Response:** The system displays the newly generated password and a timestamp, and logs this information in the session history.

**Comments:** The system must ensure that the generated password meets the security standards for the custom settings. If the customization is incompatible, the system should notify the user and suggest that they make adjustments to their custom settings. **Sequence Diagram:** 



## 2) Use Case:

**Actors**: User, Password Generator System (PGS)

**Description**: The user clears the history of all passwords generated in the current session, removing any trace of previously generated passwords and their associated timestamps.

**Data**: Session history of generated passwords with the timestamps

**Stimulus**: User clicks the "Clear History" button and confirms the action.

**Response**: The system deletes all records from the session history. The session history display will then be blank again.

**Comments**: This action is irreversible, so the system should require user confirmation to prevent accidental deletion of the session history. This feature is designed to protect the user's privacy and security.

## Sequence Diagram:

