Subject web application: StudInfoSys

StudInfoSys is a web application, containing one java servlet. StudInfoSys helps maintain students' information, including their contact information, personal webpages, and their levels of technical expertise.

Specific requirements

Functional requirements

Use Case Name: addStudInfo

Use Case ID: StudInfoSys-1

Actors: web users, students

Brief Description: The system allows users to enter their contact information, personal webpages, and the levels of technical expertise.

Pre-Conditions: None.

Main Flow of Events:

- 1. User enters First Name, Last Name, Major, PIN, Email, Day Phone, URL (personal webpage), and a username and password combination for the URL.
- 2. User selects his/her levels of technical expertise.
- 3. User presses the 'Submit New' button.
- 4. The system validates the user credentials to ensure that the First Name and Last Name entered does not exist in the system.
- 5. The system stores the user information in the system.
- 6. The system displays an acknowledgement.

Post-Conditions: The system displays an acknowledgement.

Alternative Flows and Exceptions:

Alternative 1, Insert Point Step 4-6

If the combination of First Name and Last Name already exists in the system, the system displays an error messages indicating that the name has been taken and thus cannot submit a new user.

Alternative 2, Insert Point Step 4

If First Name, Last Name, Major, PIN, Email, Day Phone, URL (personal webpage), and/or a combination of username and password for the URL has not been entered, the system displays an error messages requiring the user to enter them before submitting the form.

Alternative 3, Insert Point Step 3-6

If the user presses the 'Reset' button, the system resets the form, i.e., clear the data entries.

Assumptions: None.

Use Case Name: retrieveStudInfo

Use Case ID: StudInfoSys-2

Actors: web users, students

Brief Description: The system allows users to retrieve and view their information.

Pre-Conditions: None.

Main Flow of Events:

- 1. User enters First Name, Last Name, and PIN.
- 2. User presses the 'Retrieve' button.
- 3. The system validates the user credentials.
- 4. The system displays the user's information.

Post-Conditions: The system displays the user's information.

Alternative Flows and Exceptions:

Alternative 1, Insert Point Step 3-4

If the system cannot validate the user credentials, it displays an error messages indicating that the combination of the name and PIN is incorrect.

Alternative 2, Insert Point Step 3-4

If First Name, Last Name, and/or PIN has not been entered, the system displays an error messages requiring the user to enter them before submitting the form.

Alternative 3, Insert Point Step 2-4

If the user presses the 'Reset' button, the system resets the form, i.e., clearing the data entries.

Assumptions: None.

Use Case Name: updateStudInfo

Use Case ID: StudInfoSys-3

Actors: web users, students

Brief Description: The system allows users to update their information, excluding First Name and Last Name.

Pre-Conditions: User has registered with the system.

Main Flow of Events:

- 1. User retrieves his/her information. The retrieveStudInfo use case is included.
- 2. User modifies his/her information as needed.
- 3. User presses the 'Submit Update' button.
- 4. The system validates the user credentials.
- 5. The system displays the user's information.

Post-Conditions: The system displays the user's information.

Alternative Flows and Exceptions:

Alternative 1, Insert Point Step 4-5

If the system cannot validate the user credentials, it displays an error messages indicating that the combination of the name and PIN is incorrect and thus cannot update the information.

Alternative 2, Insert Point Step 4-5

If First Name, Last Name, Major, PIN, Email, Day Phone, URL (personal webpage), and/or a combination of username and password for the URL has not been entered or been missing, the system displays an error messages requiring the user to enter them before submitting the form.

Alternative 3, Insert Point Step 3-5

If the user presses the 'Reset' button, the system resets the form, i.e., clearing the data entries.

Assumptions: None.