- SRS 01. The system provides the UI which receive the name, surname, username, password, reenter password, and the student id for the registration.
- SRS 02. The system can check the name format. The name format should be only character and its length is less than twenty.
- SRS 03. The system can check the surname format. The surname format should be only character and its length is less than twenty.
- SRS 04. The system can check the username format. The username format should be the e-mail format.
- SRS 05. The system can check the password format. The password must be 4-20 characters. The password must contain the small letter, capital letter, and number.
- SRS 06. The system can validate whether the password in the password field and re-password field are the same.
- SRS 07. The system can validate the student id format. The student id should be exact 9 digit and the first two letter should not be more than the current BE. The faculty code should be between 01-21, and the 7th digit must be 0 or 5.
- SRS 08. The system shall retrieve the existing student data from the student id.
- SRS 09. The system shall retrieve the existing student data from the student e-mail.
- SRS 10. The system shall add a new student information to the database using name, surname, username, password, and the student id.
- SRS 11. The system shall send a successful registration email to the user
- SRS 12. The system shall provide the successful registration page.
- SRS 13. The system shall display the error message "The name must be only characters"
- SRS 14. The system shall display the error message "The surname must be only characters"
- SRS 15. The system shall display the error message "The username must be an e-mail"
- SRS 16. The system shall display the error message "The password length should be 3-20"
- SRS 17. The system shall display the error message "The password must contain the capital letter, and number"
- SRS 18. The system shall display the error message "Stupid, cannot you remember your password?"
- SRS 19. The system shall display the error message "sorry the student id is incorrect"
- SRS 20. The system shall display the error message "The student id is already existed"
- SRS 21. The system shall display the error message "The e-mail is already used"

- SRS 04. The system can check the username format. The username format should be the e-mail format.
- SRS 05. The system can check the password format. The password must be 4-20 characters. The password must contain the small letter, capital letter, and number.
- SRS 22. The system provides the login user interface which receive the user name and password
- SRS 23. The system validates the username and password
- SRS 24. The system provides the grade report UI which consists of all the courses which the current student enrolls, the grade for each course, and the overall gpa of the current student.
- SRS 25. The system shall display the error message. "Error, the username and password is not matched".
- SRS 26. The system retrieves the student information from the username.
- SRS 27. The system store the student information as the current student.

URS 3

- SRS 28. The system provides the UI for add course grade. The UI must contain the list of course ids, course names, and credit from database for the user to select. The system also show a list of grade that can be assigned which are "A", "B+", "B", "C+", "C", "D+", "D", and "F". The submit button is required for add the grade.
- SRS 29. The system can add the grade to the current user selected course.
- SRS 30. The system can query a list of courses which the student enroll.

URS 4

- SRS 24 The system provides the grade report UI which consists of all the courses which the current student enrolls, the grade for each course, and the overall gpa of the current student.
  - SRS 31. The system shall calculate the gpa of the current students

The GPA calculation is calculated by

- 1. Multiply total credit of each course by the grade point (A=4, B+ = 3.5, B=3, C+ = 2.5, C = 2, D+ = 1.5, D = 1, and F = 0).
- 2. Add up the total number of credits.
- 3. Add up the total of grade points.
- 4. Divide the total grade points by the total credits