

Introduction:

Our consumers target groups are students and teachers, we will be making test as a students or teachers. As we are making a web application software, we will test it via web browser. We also provide the account for testing: Student-> (userid: s1000000, password: 1234); Teacher -> (userid: t1000000, password: 1234); Admin -> (userid: admin, password: 1234). For the user type selection, choose the suitable one, if you are student, choose the student one, vice versa. If you want to login as admin, just base on what system you want to use: Teacher or Student. For example, if you want to edit the student personal information, choose the student user type.

Validation testing:

Test case type	description	Test step	Expected result
Basic function	Student can edit their personal information.	Change the address to hkmu, jcc .click save button and ok from the dialog.	The address should be updated to hkmu,jcc after saving.
	Teacher can upload the Grade of student.	Click "Edit Courses Result (Current Semester) and upload the student grade via student list in course S350F and save.	Student account user should see the courses grade when the semester result announced and student can't make changes of the grades. Teacher can view the updated Grade immediately.
	User can search course by course code .	Click "Search course information" and using search bar with course code (S350F) to search course information.	Course information (Title, course code, corresponding department, credit, category and Lecturer) will be shown and can't be edited.
Additional function	User do not need to input password after using remember me function.	User tick the remember me box while login.	After logout and redirect to login page, the user id and password and user type will automatically inserted.
Security	Student can't change their user id, admission date, birth date and name.	Click "Personal information" and try to make changes to Student ID.	The text box should not be response to any pointer events.

Deflecting test:

Test case type	description	Test step	Expected result
Error Handling	In teacher system, don't select any grade in the list and try to update the grade.	Click "Edit Courses Result(Current Semester)", choose course S312F, and directly click update without choosing the grade.	The result won't be update, it just redirect user to the homepage.
	In student system, save the personal email without an @.	Click "Personal information" and try to save the email address as "hkmu.com".	It will show message reminds user that "Please include an '@' in the email address. 'hkmu.com' is missing an '@'."
	When user login, their input data will be validate first, then check with the Database to prevent SQL injection.	In the login page, add a single quote after the user id.	The login page will show the message "Incorrect User id or password".
	User can't access the pages beyond their user type, like student can't access to Teacher's homepage.	After login as a student, change the URL from "/Student/homepage.php" to "/Teacher/homepage.php".	It will redirect the user to login page since they have no access to that page.
	Database manipulation from client-side application.	Login as student and click the "Academic Result". Open developer tools by F12, try to change the Grade value of either one course. The values will reflect in the page directly.	The value will be changed temporarily in that page, but it should not be affect to the Database stored value. If reload the page, the value will be restored as the stored value.