

| Categories | Modules | Descriptions |
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| Authentication | Login | <ul style="list-style-type: none"> Authenticate users such as admin, lecturer, and students by entering username and password. |
| | Change Password | <ul style="list-style-type: none"> Users must be authorized into the system to change password. Users need to re-enter their current password and enter new password to change password Users receives password change information on alternate email. |
| | Change Email | <ul style="list-style-type: none"> Users must be authorized into the system to change alternate email. Users need to enter current password and new alternate email |
| | Forgot Password | <ul style="list-style-type: none"> Users need to enter their alternate email. Users receives link on alternate email to create new password. |
| | Locked Account due to Wrong Password Entries (6 times) | <ul style="list-style-type: none"> System sends link via email to user's alternate email. Users required to open the link and change their password. |
| | First Time Login | <ul style="list-style-type: none"> Users need to enter new password and alternate email. |
| Profile | User Profile | <ul style="list-style-type: none"> Users views and updates their information such as username, password, and email. |
| Admin | Manage User | <ul style="list-style-type: none"> Create, Read, Update and Delete, student, and lecturer account. |
| | Manage Course | <ul style="list-style-type: none"> Create, Read, Update and Delete courses. |
| | Course Assignment | <ul style="list-style-type: none"> Create, Read, Update and Delete course assignment to lecturer. |
| Lecturer | Learning Material | <ul style="list-style-type: none"> Create, Read, Update and Delete learning material |

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| | Assignment | <ul style="list-style-type: none"> • Create, Read, Update and Delete assignment. • Uploads assignment files. • Downloads assignment files. |
| | Quiz | <ul style="list-style-type: none"> • Create, Read, Update and Delete quiz. • Create, Read, Update and Delete quiz questions. • View students mark. |
| Student | Course Registration | <ul style="list-style-type: none"> • Registers to an existing course. • Views registered course. |
| | Learning Material | <ul style="list-style-type: none"> • Downloads learning material |
| | Assignment | <ul style="list-style-type: none"> • Views assignment based on each registered course. • Downloads assignment files. • Uploads and deletes answer files. |
| | Quiz | <ul style="list-style-type: none"> • Views quiz based on each registered course. • Answers quiz and confirms answer. • Views quiz mark. |
| Security | Hash Function | <ul style="list-style-type: none"> • Users' private credentials are hashed using SHA256. |
| | OWASP Application Security Verification Standard (ASVS) | <ul style="list-style-type: none"> • Complies ASVS for authentication and session management verification. |
| Session management | Active session | <ul style="list-style-type: none"> • Views active session |
| | Terminate session | <ul style="list-style-type: none"> • Users able to terminate active session |
| | Login log | <ul style="list-style-type: none"> • Users able to view past login details |