# **Version 1.0.1 Episode 2﻿﻿﻿﻿**

# Project Description

We developing a website that provides online learning platform. This website will allow qualified academics to create short courses on a wide variety of Information Technology topics. A student who wants to take courses must subscribe to the service also organisations will be allowed to pay for subscription for its members.

Quotation:

*Salary per person=* R 250.00

*Salary for all members per week=* R 18 750.00

*Salary for the whole project(11 weeks)=* R 206 250.00

*Hardware Costs( Laptops,Headphones,Server)=* R51 000.00

*Overhead Expenses(Rent,Food,Transport) =* R 20 000.00

*Total =* R 277 250.00

# Learn Presentation





# Use Cases

This use case shows the interaction between the user and constructed system when the user/s uses the system to perform various actions according to their roles. The following sections explain brief descriptions and step-by-step descriptions

**User**

## Registration use case

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| **Brief Description**  Registration use case enables the user to register to the Online Learning System (OLS). |
| **Step-by-step Description of Normal case scenario**   1. The user start-up the system 2. The system produces window interface which the user can use to interact with the system 3. The user clicks on register link 4. The user is presented with a registration form 5. The user enters all required fields in the registration form 6. The user clicks on the register button 7. The user is presented with the confirmation message that registration was successful 8. The user is redirected to the home page   **Step-by-step Description of Best case scenario**   1. The user start-up the system 2. The system produces window interface which the user can use to interact with the system 3. The user clicks on register link 4. The user is presented with a registration form 5. The user enters all required fields in the registration form 6. The user enters information that is required and there are no missing fields 7. The user clicks on the registration button 8. The users is presented with confirmation message that registration was successful 9. The user is redirected to the home page   **Step-by-step Description of Worst case scenario**   1. The user start-up the system 2. The user is presented with the registration form 3. The user enters invalid data in the form 4. The user is unable to register to the system |

**Auditor**

## Audit Work use case

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| **Brief Description**  The Audit work use case enables the auditor user to login and audit the work in the Online Learning System (OLS). |
| **Step-by-step Description of Normal case scenario**   1. The auditor clicks on the Audit work link 2. Auditor is presented with all the course material that needs to be audited 3. The auditor clicks on the material that he first needs to audit 4. The auditor checks the course material and validates the material 5. Once the material has been audited, the auditor confirms that the material can be presented to the students 6. Auditor saves and confirm the audit 7. If there is another work that needs to be audited, the auditor is presented with the next button to go to the next work that needs to be audited 8. Auditor generates a report. 9. The auditor proceeds to the next work that needs to be audited   **Step-by-step Description of Best case scenario**   1. The auditor clicks on the Audit link 2. Auditor is presented with all the course material that needs to be audited 3. The auditor chooses the material that needs to be audited first 4. All work is clear and every work is in order 5. Auditor makes successful audits to the work 6. Auditor makes all necessary changes to the work and saves all changes 7. Once the material has been audited, the auditor confirms that the material can be presented to the student 8. If there are another work that needs to be audited, the auditor is presented with the next button to go the next work that needs to be audited 9. The auditor proceeds to the next work that needs to be audited   **Step-by-step Description of Worst case scenario**   1. Auditor clicks on the audit link 2. The user is presented with the material that needs to be audited    * The material that needs to be audited cannot be audited    * The material lacks meaning and the auditor is unable to audit the work    * The auditor makes mistakes is the audits 3. The system crashes or hangs and the auditor is lest in the dark not knowing what to do next 4. The auditor exists the system without making any audits |

## Generate report use case

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| **Brief Description**  Generate report enable the auditor generate reports in the Online Learning System (OLS). |
| **Step-by-step Description of Normal case scenario**   1. Auditor clicks the generate report link 2. Auditor chooses which report to generate 3. The auditor clicks on the type of report to generate 4. Once the auditor is at the report he wishes to generate, the auditor starts generating the report 5. The auditor the saves the report and proceed to the next page   **Step-by-step Description of Best case scenario**   1. The auditor clicks the generate report link 2. Auditor chooses which report to generate    * Auditor can choose between application usage, auditor reports, student feedback and income report 3. The auditor starts generating the report 4. Auditor saves the reports and confirms 5. Once the report has been generated, the auditor proceeds to the next page   **Step-by-step Description of Worst case scenario**   1. Auditor clicks on generate report link 2. Auditor is not presented with the options to generate reports 3. The auditor is unable to generate any reports 4. The system hangs |

## View student marks use case

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| **Brief Description**  View student feedback enables the auditor to view feedback from the student in the Online Learning System (OLS). |
| **Step-by-step Description of Normal case scenario**   1. The auditor clicks on view marks link 2. Auditor sees all marks from the student   **Step-by-step Description of Best case scenario**   1. Auditor clicks on view marks link 2. The auditor is presented with all the marks of the students 3. The auditor makes decisions from the marks 4. From the marks, the auditor can make changes to the courses   **Step-by-step Description of Worst case scenario**   1. The auditor clicks on view marks link 2. The marks of the students are presented to the auditor    * The marks are not meaningful to the auditor    * Auditor cannot make necessary decisions with the marks 3. The auditor is not presented with the marks from the students 4. The system hangs and nothing is presented and the auditor does not know where to go |

**Manager**

## View comments and View dashboard use case

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| **Brief Description**  The view comments and view dashboard use cases enables the Code\_Coordinator or Manager user to login to the O\_Learn (Online Learning System) and be able to view comments from the upload stream live video or view dashboard |
| **Step-by-step Description of Normal case scenario**   1. The user start-up the system 2. The system produces window interface which the user can use to interact with the system 3. The user clicks view available button from the system window interface depending on which user has logged in 4. The system generates a list of all available messages 5. Generated results are given to the user on the system’s interface 6. The user can view all the information produced. 7. When satisfied by the results then the user clicks ok button on the current interface that shows available information 8. The system takes back the user to the initial window interface.   **Step-by-step Description of Best case scenario**   1. The user start-up the system 2. The system produces window interface which the user can use to interact with the system 3. The user clicks view available button from the system window interface depending on which user has logged in 4. The system generates a list of all available messages in a database 5. The user mistakenly clicks another button while the system is still generating the list 6. The system stops generating the list and performs another function requested by the user 7. The user loses the first request of viewing the list of available messages   **Step-by-step Description of Worst case scenario**   1. The user start-up the system 2. The system produces window interface which the user can use to interact with the system 3. The user clicks view available button from the system window interface 4. The Code\_Coordinator has logged in but the view is for dashboards 5. The user loses interest and signed out without checking the comments from student or the way round. |

## Assign roles use case

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| **Brief Description**  The assign roles use case enables the Manager user to login to the O\_Learn (Online Learning System) and be able to assign roles for different users in the system. |
| **Step-by-step Description of Normal case scenario**   1. The user start-up the system 2. The system produces window interface which the user can use to interact with the system 3. The user clicks assign roles button from the system window interface 4. The user can assign roles to the users that has been registered on the system 5. When satisfied by the results then the user clicks ok button 6. The system takes back the user to the initial window interface.   **Step-by-step Description of Best case scenario**   1. The user start-up the system 2. The system produces window interface which the user can use to interact with the system 3. The user clicks assign roles button from the system window interface 4. The assign roles to all users that has registered on the system. 5. If there is one user assigned different users can able to check it, and correct it. 6. Save all users to the database 7. Go back to the starting page if the user want to or sign out from the system.   **Step-by-step Description of Worst case scenario**   1. The user start-up the system 2. The system produces window interface which the user can use to interact with the system 3. The user clicks assign roles available button from the system window interface, but the users find it difficult to assign role 4. The user just decide to sign out. |

**Course Coordinator**

## Edit/Delete use case

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| **Brief Description**  The Edit/Delete use case enables the Code\_Coordinator user to login to the O\_Learn (Online Learning System) and be able to edit or delete course, assignment. |
| **Step-by-step Description of Normal case scenario**   1. The User start-up the system 2. The system produces window interface which the User can use to interact with the system 3. The User enters the login User name and password from textboxes the system’s login platform of the interface 4. The User clicks the login button 5. The system validates the User’s login credentials from the database of registered system Users and the role that a specific User has on the system 6. The system gets positive feedback from the database of system Users that the User is registered and provided right login credentials 7. The system takes the User into a logged in interface where the functionality of the system is limited to the User’s role.   **Step-by-step Description of Best case scenario**   1. The User start-up the system 2. The system produces window interface which the User can use to interact with the system 3. The User enters the login User name and password from textboxes the system’s login platform of the interface 4. The User clicks the login button 5. The system validates the User’s login credentials from the database of registered system Users 6. and the role that the User has on the system 7. The system gets positive feedback from the database of system Users that the User is registered and provided right login credentials. 8. The system provides the functionality of the User has on the system. 9. The User clicks edit or delete tab button from the system’s interface. 10. The system provides the User with the interface for editing or deleting tab to the system. 11. From this interface the User clicks the browse button that enable him/her to write the information on to the tab. 12. Then clicks ok button from the dialog box to edit the desired message to system. 13. The system provides the message that had been posted successfully. 14. The User clicks another browse button that enable him/her to select a document for the social tab to post. 15. The User selects the document of the social tab he/she want to post into the system 16. The User clicks ok button from the post dialog box to post the desired update or after editing. 17. The system provides the message that had been posted successfully or the changes have been made successfully. 18. The User realises that the message is wrong. 19. He/she then clicks again edit or delete button for posting the message. 20. The User selects the right message of the social tab he/she want to post into the system 21. Then clicks ok button from the post dialog box to post the desired message. 22. The system replaces the first posted wrong message with the newly posted document 23. The User clicks edit message button from the system’s interface. 24. The system provides the User with the interface for editing the message. 25. The User edit or delete they want to post into the system as social tab or edits message. 26. Then clicks ok button from the post dialog box to post the desired message. 27. The system provides the message that says changes have been made successfully.   **Step-by-step Description of Worst case scenario**   1. The User start-up the system 2. The system produces window interface which the user can use to interact with the system 3. The User enters the login username and password from textboxes the system’s login platform of the interface 4. The User clicks the login button 5. The system validates the User ’s login credentials from the database of registered system users and the role that the User has on the system 6. The system gets positive feedback from the database of system users that the User is registered and provided right login credentials. 7. The system provides the functionality of the User has on the system. 8. The User clicks edit button or delete message button from the system’s interface. 9. The system provides the User with the interface for editing or delete course/assignments to the system. 10. From this interface the User clicks the edit course button that enable him/her to edit a course information to the server. 11. The post dialog shows that there are no changes to the system 12. The User clicks the cancel button from the post dialog. 13. The User will have nothing written on the system therefore no changes have been made on the system. |

## Upload media and Stream live videos use case

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| **Brief Description**  The Upload media and stream live videos use cases enables the Code\_Coordinator user to login to the O\_Learn (Online Learning System) and be able to upload media (videos, images) |
| **Step-by-step Description of Normal case scenario**   1. The User start-up the system 2. The system produces window interface which the user can use to interact with the system 3. The User enters the login username and password from textboxes the system’s login platform of the interface. 4. The User clicks the login button 5. The system validates the User login credentials from the database of registered system users and the role that the User has on the system 6. The system gets positive feedback from the database of system users that the User is registered and provided right login credentials. 7. From this interface the User clicks the browse button that enable him/her to write the information on to the tab. 8. Then clicks ok button from the dialog box to post the desired message to system. 9. The system provides the message that had been uploaded successfully. 10. The User then clicks the save button to save the uploaded media 11. The uploaded media gets saved into the database.   **Step-by-step Description of Best case scenario**   1. The User start-up the system 2. The system produces window interface which the user can use to interact with the system 3. The User enters the login username and password from textboxes the system’s login platform of the interface 4. The User clicks the login button 5. The system validates the login credentials from the database of registered system users and the role that the User has on the system 6. The system gets positive feedback from the database of system users that the User is registered and provided right login credentials. 7. The system provides the functionality of the User has on the system. 8. The User clicks the upload media button from the system’s interface. 9. The system provides the User with the interface for upload media tab to the system. 10. From this interface the User clicks the browse button that enable him/her to upload media information on to the tab. 11. Then clicks ok button from the dialog box to upload the desired media to system. 12. The system provides the message that had been posted successfully. . 13. The User realises that the message is wrong. 14. He/she then clicks again upload button for uploading the message. 15. Then clicks ok button from the upload dialog box to post the desired media. 16. The system replaces the first uploaded wrong media with the newly posted document 17. The User can able to start again.   **Step-by-step Description of Worst case scenario**   1. The User start-up the system 2. The system produces window interface which the user can use to interact with the system 3. The User enters the login username and password from textboxes the system’s login platform of the interface 4. The User clicks the login button 5. The system validates the User ’s login credentials from the database of registered system users and the role that the User has on the system 6. The system gets positive feedback from the database of system users that the User is registered and provided right login credentials. 7. The system provides the functionality of the User has on the system. 8. The User clicks edit button or delete message button from the system’s interface. 9. The system provides the User with the interface for editing or delete course/assignments to the system. 10. From this interface the User clicks the upload media button that enable him/her to upload media information to the server. 11. The upload media in wrong format dialog 12. The User clicks the cancel button from the upload dialog. 13. The system just keeps on loading. |

## Create course use case

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| **Brief Description**  The Create course use case enables the Code\_Coordinator user to login to the O\_Learn (Online Learning System) and be able to create course and be able to edit delete that course. |
| **Step-by-step Description of Normal case scenario**   1. The User start-up the system 2. The system produces window interface which the user can use to interact with the system 3. The User enters the login username and password from textboxes the system’s login platform of the interface. 4. The User clicks the login button 5. The system validates the User login credentials from the database of registered system users and the role that the User has on the system 6. The system gets positive feedback from the database of system users that the User is registered and provided right login credentials. 7. The system provides the functionality of the User for create course has on the system. 8. The User for create course clicks create button from the system’s interface. 9. The system provides the User for create course with the interface for creating tab to the system. 10. From this interface the User for create course clicks the browse button that enable him/her to write the information on to the tab. 11. Then clicks ok button from the dialog box to create the course the desired message to system. 12. The system provides the message that says the course had been created successfully 13. The User then clicks the save button to save the created course 14. The created course gets saved into the database. 15. The User for create course clicks ok button from the dialog box confirm he/she got the message.   **Step-by-step Description of Best case scenario**   1. The User start-up the system 2. The system produces window interface which the user can use to interact with the system 3. The User enters the login username and password from textboxes the system’s login platform of the interface 4. The User clicks the login button 5. The system validates the login credentials from the database of registered system users and the role that the User has on the system 6. The system gets positive feedback from the database of system users that the User is registered and provided right login credentials. 7. The system provides the functionality of the User has on the system. 8. The User clicks the create button from the system’s interface. 9. The system provides the User with the interface for creating tab to the system. 10. From this interface the User clicks the browse button that enable him/her to write the information on to the tab. 11. Then clicks ok button from the dialog box to post the desired message to system. 12. The system provides the message that had been posted successfully. . 13. The User realises that the message is wrong. 14. Then clicks ok button from the post dialog box to post the desired message. 15. The system replaces the first posted wrong message with the newly posted document 16. The User can able to start again.   **Step-by-step Description of Worst case scenario**   1. The User start-up the system 2. The system produces window interface which the user can use to interact with the system 3. The User enters the login username and password from textboxes the system’s login platform of the interface 4. The User clicks the login button 5. The system validates the User ’s login credentials from the database of registered system users and the role that the User has on the system 6. The system gets positive feedback from the database of system users that the User is registered and provided right login credentials. 7. The system provides the functionality of the User has on the system. 8. The User clicks edit button or delete message button from the system’s interface. 9. The system provides the User with the interface for creating course to the system. 10. The post dialog shows that there are no changes to the system 11. The User clicks the cancel button from the post dialog. 12. The User will have nothing written on the system therefore no changes have been made on the system. |

**Students**

## Subscription to a course use case

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| **Brief Description**  The subscription use case enable the user to be able to subscribe to a particular course they want to undertake. |
| **Step-by-step Description of Best case scenario**   1. The user enters the website 2. The user is redirected to the login page. 3. The user enters the login username and password on textboxes of the websites login interface. 4. The user clicks the login button 5. The user is logged in as student. 6. The user is clicks on the subscribe tab. 7. The user is redirected to the subscribe page 8. The user chooses the suitable package including their desired course for themselves. 9. The user clicks subscribe. 10. The user is redirected to the courses page.   **Step-by-step Description of case Normal scenario**   1. The user enters the website 2. The user is redirected to the login page. 3. The user enters the login username and password on textboxes of the websites login interface. 4. The user clicks the login button 5. The user is logged in as student. 6. The user is clicks on the subscribe tab. 7. The user is redirected to the subscribe page   **Step-by-step Description of Worst case scenario**   1. The user enters the website 2. The user is redirected to the login page. 3. The user enters the login username and password on textboxes of the websites login interface. 4. The user clicks the login button 5. The user is logged in as student. 6. The user is clicks on the subscribe tab. 7. The user is redirected to the subscribe page 8. The user chooses the suitable package including their desired course for themselves. 9. The subscribe button doesn’t work and website freezes |

## Write assignments and View marks use case

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| **Brief Description**  Write assignments and View marks use case allows users to write assignments and view their marks. |
| **Step-by-step Description of Best case scenario**   1. The user enters the website 2. The user is redirected to the login page. 3. The user enters the login username and password on textboxes of the websites login interface. 4. The user clicks the login button 5. The user is logged in as student. 6. The user is clicks on the course tab. 7. The user is redirected to the course page where the course content is shown. 8. The user clicks assignment link 9. User writes their assignment and completes it. 10. The user is redirected to the marks page   **Step-by-step Description of case Normal scenario**   1. The user enters the website 2. The user is redirected to the login page. 3. The user enters the login username and password on textboxes of the websites login interface. 4. The user clicks the login button 5. The user is logged in as student. 6. The user is clicks on the course tab. 7. The user is redirected to the course page where the course content is shown. 8. The user clicks assignment link 9. User writes their assignment and doesn’t complete it. 10. The system auto submits the assignment   **Step-by-step Description of Worst case scenario**   1. The user enters the website 2. The user is redirected to the login page. 3. The user enters the login username and password on textboxes of the websites login interface. 4. The user clicks the login button 5. The user is logged in as student. 6. The user is clicks on the course tab. 7. The user is redirected to the course page where the course content is shown. 8. The user clicks assignment link 9. User writes their assignment and completes it. 10. The user is redirected to the marks page but the assignment marks aren’t there. |

## Test code use case

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| **Brief Description**  The test code use case enables users to be able to test their solutions or practice codes. |
| **Step-by-step Description of Best case scenario**   1. The user enters the website 2. The user is redirected to the login page. 3. The user enters the login username and password on textboxes of the websites login interface. 4. The user clicks the login button 5. The user is logged in as student. 6. The user is clicks on the course tab. 7. The user is redirected to the course page where the course content is shown. 8. The user clicks test code link 9. User writes code and its output displayed.   **Step-by-step Description of Normal case scenario**   1. The user enters the website 2. The user is redirected to the login page. 3. The user enters the login username and password on textboxes of the websites login interface. 4. The user clicks the login button 5. The user is logged in as student. 6. The user is clicks on the course tab. 7. The user is redirected to the course page where the course content is shown. 8. The user clicks test code link 9. User writes code and its wrong. 10. User fixes the code and its output is displayed.   **Step-by-step Description of Worst case scenario**   1. The user enters the website 2. The user is redirected to the login page. 3. The user enters the login username and password on textboxes of the websites login interface. 4. The user clicks the login button 5. The user is logged in as student. 6. The user is clicks on the course tab. 7. The user is redirected to the course page where the course content is shown. 8. The user clicks test code link 9. User writes code and it slows down the system |

## View Course, View live video stream use case

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| **Brief Description**  The view course and view live stream enables the user to be able to see courses and be able to view videos in real time as they are streamed |
| **Step-by-step Description of Best case scenario**   1. The user enters the website 2. The user is redirected to the login page. 3. The user enters the login username and password on textboxes of the websites login interface. 4. The user clicks the login button 5. The user is logged in as student. 6. The user is clicks on the course tab. 7. The user is redirected to the course page where the course content is shown. 8. The user chooses the live video link 9. The user is redirected to the live stream where there is a comment section. 10. The user comments on the live stream.   **Step-by-step Description of Normal case scenario**   1. The user enters the website 2. The user is redirected to the login page. 3. The user enters the login username and password on textboxes of the websites login interface. 4. The user clicks the login button 5. The user is logged in as student. 6. The user is clicks on the course tab. 7. The user is redirected to the course page where the course content is shown. 8. The user chooses the live video link 9. The user is redirected to the live stream but the video is unavailable 10. The user reloads and the video becomes available   **Step-by-step Description of Worst case scenario**   1. The user enters the website 2. The user is redirected to the login page. 3. The user enters the login username and password on textboxes of the websites login interface. 4. The user clicks the login button 5. The user is logged in as student. 6. The user is clicks on the course tab. 7. The user is redirected to the course page where the course content is shown. 8. The user chooses the live video link 9. The video is not supported |

## Noun Extraction

**Stage 1. Concise problem definition**

The O-Learn website will be a platform for users (student, code\_coordinator, manager, presenter and auditor) that will be login learn IT related courses. It will have a code interpreter for students to be able to write code. Write assignments and give comments during live video streams after they join in on the streaming. Students will be given access to the courses they want to undertake by subscribing to them. The course coordinate will be able to create courses, that will thereafter be able to upload media stream videos or edit the courses they have created. Auditors of the site will be able to audit work, views student’s marks and write reports. Managers will be able to assign roles and have their dashboards. All users will have to be login or register and be authenticated to use the website.

**Stage 2. Identify the nouns**

Auditor

Code Interpreter

Comment Class

Course

Course Coordinator

Create Course

Edit Course

Live Stream

Media Class

O-Learn

Student

Subscribe

Upload Media

View Marks

Write Assignment

Roles

Dashboard

Assign role

Manager

Report

Register

Subscribe

# User



# Manager



# Auditor



# Course Coordinator



# Student

