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**National University of Computer and Emerging Sciences**

Software Engineering

**“Deliverable#1 – Planning Phase and Outlining Sprint”**

**E-Learning System**

**STUDENTS NAME AND REGISTRATION NUMBERS:**

Muhammad Umaid Khakwani i19-0666

Hanzla Sibghat i19-0505

Saad Ahmad Jilani i19-0615

**DEGREE PROGRAM:** BS-CS-2019

**SECTION:** D

**SUBJECT NAME:** Software Engineering

**DATE OF SUBMISSION: March 05, 2022**

**SUBMITTED TO:** Dr. Maryam Abdul Ghafoor

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**Title**

E-Learning System

**Project Introduction**

E-Learning system is a platform where students can learn different courses of their choice and gain certificates which will help them in their CV creation too.

**Project Scope**

E-Learning System will be an automated and computerized system, designed as a Web Application, to help connect students and teachers on a platform where teachers can post course related materials and students can give exam to get certificates. This application will track student attendance and penalize the students who have less attendance than threshold. A user-friendly dashboard will be made which will show the attendance and the course allocation of students. A chatbot is made to help students and teachers to understand the application better.

**Nature of the Project**

Web app

**Product Backlog**

\*APP USER (admin, student, teacher)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **ID** | **User Stories** | **Estimate** | **Priority** | **Acceptance criteria** |
| 1 | As an App User I want to register in the system so that I can learn or teach | 9 hours | 1 | * click register button then I can access all services * on signup page I should fill username (should be alpha numeric) and password (at least 8 characters with 1 uppercase) with birthdate, and degree program |
| 2 | As a student I want to enroll in the courses so that I can learn the course | 5 hours | 3 | * select the course (drop down menu according to selected degree program) * click register then I can take classes of that course |
| 3 | As a App User I want to take help with chatting with chatbot so that I can understand the site better. | 6 hours | 15 | * click on request chatbot then a window opens * we can send message and query to the chatbot. |
| 4 | As a student I want to take my exam reports so that I can figure out my progress | 6 hours | 18 | * when I click to get report, it prints the report on the screen * we can take screenshot of it |
| 5 | As a student I want to take my certificate in the end of course with a grade on it, so that I can push it on my CV | 5 hours | 17 | * After the course ends we can click on get certificate to print the certificate of that course with remarks. |
| 6 | As a teacher I want to make exams for the student so that I can make improvement in the knowledge of the students | 5 hours | 13 | * After the teacher is assigned to a course, he/she can create the exam paper in data base * we can upload it to the exam section |
| 7 | As a student I want to give rating to the teacher of the registered course | 6 hours | 19 | * Student can give rating by clicking on rating button * teacher can see the rating send by students |
| 8 | As a student, I want to get updated by the daily popup notification or any update so that I remain updated all the time. | 6 hours | 16 | * The student receives a pop-up notification. |
| 9 | As a student I want to see the dashboard so that I can see my attendance, marks and grades in respective courses on it | 6 hours | 6 | * By clicking the dashboard button, students can see their grades, marks and attendance on the dashboard. |
| 10 | As an admin I want to see all the records of teachers and students so that I can make changes according to it | 5 hours | 7 | * The admin can see the updated information and also make changings in each section. |
| 11 | As a App User I want to sign in (if existing user) so that I can access my account | 5 hours | 2 | * After signing in, App user fills username to access his/her account |
| 12 | As a admin I can upload motivational quotes so that teachers and students remain motivated | 4 hours | 12 | * Student and teacher can view the motivational quotes updated by the admin |
| 13 | As a student I want to access the course material offline so that I can learn without internet | 5 hours | 10 | * Student can download course videos from webpage by clicking download option under video |
| 14 | As a student I want to make a query to teacher | 4 hours | 11 | * Student can post their query to respected course instructor * instructor can see and reply to the query |
| 15 | As a student I want to mark my attendance according to the time I am active on LMS | 6 hours | 5 | * the system tracks a student’s active time if It is greater than 15 mins the student is marked present |
| 16 | As a student I want to keep some course material as favorite’s so I can easily access them | 5 hours | 20 | * Student favorite section is updated with the material so that he/she can access it later |
| 17 | As a student I want to discuss course material with other student and teachers in a group | 5 hours | 21 | * Group chat box is made and members are added |
| 18 | As a admin I want to take suggestions from students and teachers for the improvement of the LMS | 6 hours | 22 | * Student and teachers can send suggestions in compliant box |
| 19 | As an admin I want to rank the courses according to the maximum grades achieved in the course | 6 hours | 23 | * Course ranking will be updated and student can view and register according to course ranking |
| 20 | As an admin I want to provide students with additional reference material linking to other websites | 4 hours | 9 | * Student can access different sites through the links provided |
| 21 | As a student I want to pay for the registered course | 5 hours | 4 | * After selection of course the student gives acc number in order to register in course |
| 22 | As an teacher I want to upload course material so that student can access the videos and pdf | 4 hours | 8 | * After registration of course student can see the course materials |
| 23 | As a student I want to take exam at the end of course so that I can finish course. | 4 hours | 14 | * After the student submits the paper the teacher will mark paper and give grade. |
| 24 | As a student I can update my credentials. | 3 hours | 24 | * After registration, the student can update his/her credentials. |
| 25 | As a teacher I want to give assignments to the students so that I can keep track on student progress | 5 hours | 25 | * After teacher upload the assignment student will be able to access the pdf of assignment |

**Sprint Backlog:**

**Sprint 1: -**

|  |  |  |  |
| --- | --- | --- | --- |
| **User Story** | **Sub-story** | **Tasks** | **Time** |
| 1. | * 1. As a new user I want to enter my registration details so that I can register myself | 1.10- design home page  1.11- Create a form.  1.12- User table is created  1.13- validate the credentials  1.14- store the credentials to the database. | 1.10 2 hours  1.11 1 hour  1.12 2 hours  1.13 2 hours  1.14 2 hours |
| 11. | 11.1- as an admin I want to check if the entered user is found in data base or not  11.2- as an admin I want to check user type and proceed according to it. | 11.10- design home page to (admin, student and teacher)  11.11- create a form for sign in  11.12- check account existence in database  11.21- if account found in data base then set homepage according to user type | 11.10 1 hours  11.11 30 minutes  11.12 30 minutes  11.21 2 hours |
| 2. | 2.1- As a student I want to see all the available courses so that I can register myself | 2.10 – courses table is created  2.11 - passed courses table is created  2.12- show all the available courses  2.13- design the form which have available courses listed according to degree program. | 2.10 1 hour  2.11 30 minutes  2.12 30 minutes  2.13 2 hours |
| 2.2- as an admin I want to check if student has passed the pre req course. | 2.21- check the course in form if its pre req is passed then student can register in that course | 2.21 1 hour |
| 15. | 15.1- as a student I want to maintain my presence in the LMS. | 15.11 the student will be marked present or absent according to the starting and ending time of his/her session | 15.11 6 hours |
| 21. | 21.1- as a student I want to pay fee for the register course. | 21.10 create bank accounts table  21.11 populate the table with random acc numbers  21.12 create form  21.13 validate acc number from database  21.14 if acc number is found then user status of pay fee is set true | 21.10 30 minutes  21.11 30 minutes  21.12 2 hour  21.13 30 minutes  21.14 30 minutes |

**Roles and Duties for current Sprint# 1**

|  |  |  |
| --- | --- | --- |
| **Name** | **Role** | **Duty** |
| Umaid Khakwani | Scrum Team | Design and Code |
| Hanzla Sibghat | Product Owner | Manage Product and Sprint Backlog, Organize Work, Reporting |
| Saad Jilani | Scrum Master | Manage Scrum Process, Enforce Rules, and Remove Blocks |

Table\_2: Roles and Duties for Upcoming Sprint

**Roles and Duties for upcoming (Sprint#2)**

|  |  |  |
| --- | --- | --- |
| **Name** | **Role** | **Duty** |
| Umaid Khakwani | Product Owner | Manage Product and Sprint Backlog, Organize Work, Reporting |
| Hanzla Sibghat | Scrum Master | Manage Scrum Process, Enforce Rules, and Remove Blocks |
| Saad Jilani | Scrum Team | Contributed to the creation of user stories |

Table\_3: Roles and Duties for upcoming Sprint

**Roles and Duties for upcoming (Sprint#3)**

|  |  |  |
| --- | --- | --- |
| **Name** | **Role** | **Duty** |
| Saad Jilani | Product Owner | Manage Product and Sprint Backlog, Organize Work, Reporting |
| Umaid Khakwani | Scrum Master | Manage Scrum Process, Enforce Rules, and Remove Blocks |
| Hanzla Sibghat | Scrum Team | Contributed to the creation of user stories |