



Quick Learning App



SPRING 2023 CAPSTONE PROJECT

GUIDED BY:- Prof. Henry Wong

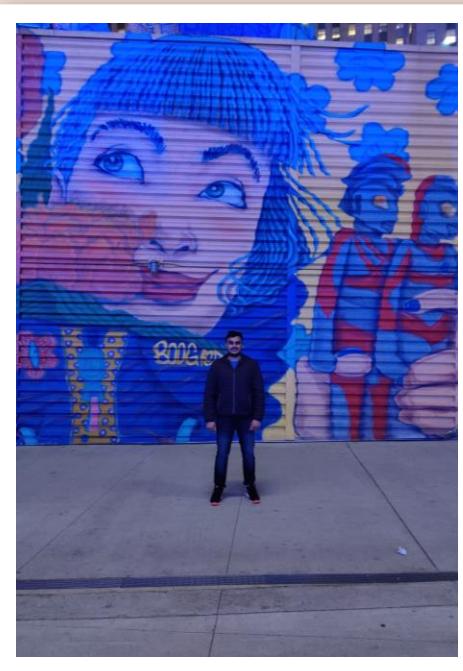


Agenda:

- Feedback
- Accountabilities
- Project Description
- Team Working Agreement
- Personas
- MVP
- Technologies
- Algorithms
- Diagrams
- Sprint Recap
- Product Backlog
- Sprint Backlog
- User stories
- Test cases
- Metrics
- Retrospective
- Stories committed for Sprint 5
- App Demo



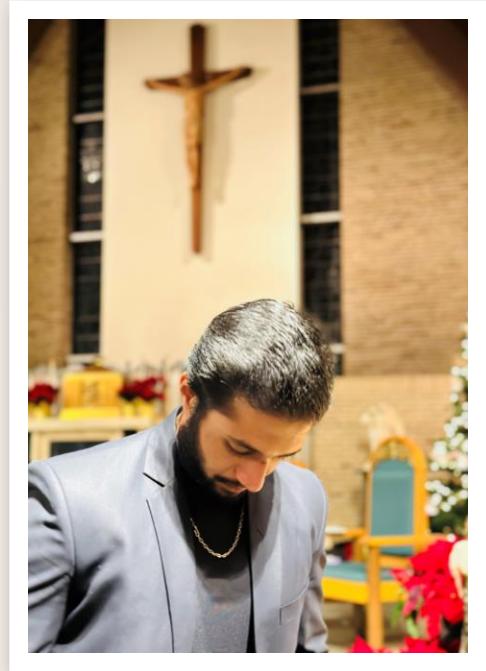
Accountabilities:



Amit Bhayal
Software Developer



Ankush Gurhani
Software Developer



Genius Machado
Software Developer



Accountabilities:



Sharanya Dave
SDE3 / Database
Administrator



Sravani Eata
Business
Analyst/Software Tester



Usha Sri Tirumalasetty
SDE 2/Software Tester



Improvements Made:

- ✓ Story Points for the tasks given and added the priority column in the Product Backlog.
- ✓ Sprint Backlog was renamed to Sprint 5 Backlog OR Current Sprint Backlog.
- ✓ Appropriate scenarios were added to the user stories.
- ✓ Committed work was removed from the team velocity chart.
- ✓ Redefined the retrospective by removing the action items.



Project Description:

Quick Learning is a web-based technology used to plan, implement, and assess a specific learning process.

Typically, QL provides an instructor with a platform to create and deliver content, manage registration and enrollment, track student progress and assessment, and deliver educational material.

It also provides students with access to course materials, assignments, and assessments. The main goal QL is to automate and streamline the administration, tracking, reporting, and delivery of educational courses or training programs.



TEAM WORKING AGREEMENT

Project Name: QuickLearning

Team Name: Brewing Technologies

Commitments:

As a project team we will:

- 1) Only agree to do work that we are qualified and capable of doing.
- 2) Be honest and realistic in planning and reporting project scope, schedule, staffing, and cost.
- 3) Operate proactively, anticipating potential problems and working to prevent them before they happen.
- 4) Keep other team members informed.
- 5) Focus on what is best for the project as a whole.
- 6) See the project through to completion.

Team Meeting Ground Rules: Participation

We will:

- 1) Keep issues that arise in meetings in confidence within the team unless otherwise indicated.
- 2) Be honest and open during meetings.
- 3) Encourage a diversity of opinions on all topics.
- 4) Give everyone the opportunity for equal participation.
- 5) Be open to new approaches and listen to new ideas.
- 6) Avoid placing blame when things go wrong. Instead, we will discuss the process and explore how it can be improved.

Team Meeting Ground Rules: Communication

We will:

- 1) Seek first to understand, and then to be understood.
- 2) Be clear and to the point.
- 3) Practice active, effective listening skills.
- 4) Keep discussions on track.
- 5) Use visual means such as drawings, charts, and tables to facilitate discussion.

Team Meeting Ground Rules: Problem Solving

We will:

- 1) Encourage everyone to participate.
- 2) Encourage all ideas (no criticism), since new concepts come from outside our normal perceptions.
- 3) Build on each other's ideas.
- 4) Use team tools when appropriate to facilitate problem-solving.
- 5) Whenever possible, use data to assist in problem-solving.
- 6) Remember that solving problems is a creative process—new ideas and new understandings often result.

Team Meeting Ground Rules: Decision Making

We will:

- 1) Make decisions based on data whenever feasible.
- 2) Seek to find the needed information or data.
- 3) Discuss criteria (cost, time, impact, etc.) for deciding on an option.
- 4) Encourage and explore different interpretations of data.
- 5) Get input from the entire team before a decision is made.
- 6) Discuss concerns with other team members during the team meetings or privately rather than with non-team members in inappropriate ways.
- 7) Ask all team members if they can support a decision before the decision is made.

Team Meeting Ground Rules: Handling Conflict

We will:

- 1) Regard conflict as normal and as an opportunity for growth.
- 2) Seek to understand the interests and desires of each party involved before arriving at answers or solutions.
- 3) Choose an appropriate time and place to discuss and explore the conflict.
- 4) Listen openly to other points of view.
- 5) Repeat what we understand to the other person and ask if it is correct.
- 6) Acknowledge valid points that the other person has made.
- 7) State our points of view and our interests in a non-judgmental and non-attacking manner.
- 8) Seek to find some common ground for agreement.

Meeting Procedures:

- 1) Meetings will begin and end on time.
- 2) Team members will come to the meetings prepared.
- 3) Agenda items for the next meeting will be discussed at the end of each session.
- 4) A Parking Lot will be used to capture 'off-the-subject' ideas and concerns.
- 5) Unresolved issues will be added to the Issues list.
- 6) If a team member cannot attend a meeting, he/she will send a representative with authority to make decisions.
- 7) Meeting tasks will be rotated among members.



Personas



Meera



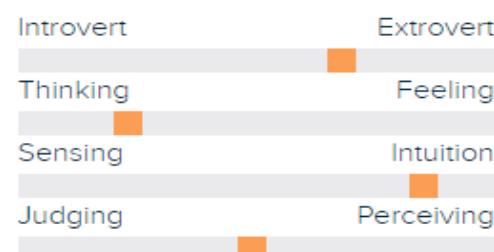
Age: 34

Work: Admin / Principal

Marital Status: Married

Location: Rochester, New York

Personality



Bio

- Being the Principal, she has the administrator privileges and rights.
- She also has the super user privileges to add or modify any of the contents on the website.

Frustrations

- Ensures the Standard Curriculums and Protocols being strictly followed.
- Providing updated resources to all the employees working under her as per the changing market scenarios.
- Meera has to manage all the teachers.

Interests

- Exploring new places.
- Playing Guitar.

Goals

- To prosper in the field of online and scalable study environment.
- Making quality education available globally for inexpensive rates.



Roger



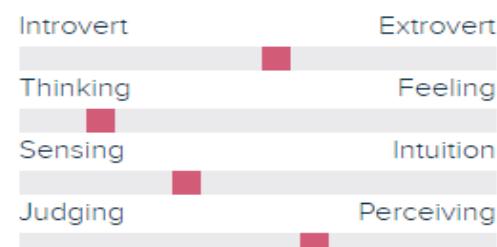
Age: 29

Work: Teacher

Marital Status: Single

Location: Anchorage, Alaska

Personality



Bio

- Roger is an instructor who teaches Mathematics.
- He manages approximately 40 students and conducts lectures online.

Frustrations

- Struggling to get free time from day to day busy life and activities.
- Trying to keep himself updated with new technology updates on his many devices.

Interests

- Learning new regional or national languages.
- Cuddling Dogs and long walks on the beach.

Goals

- Setting up an example for the community to be a better society.
- Raising an organization to help orphan pets.



Alison



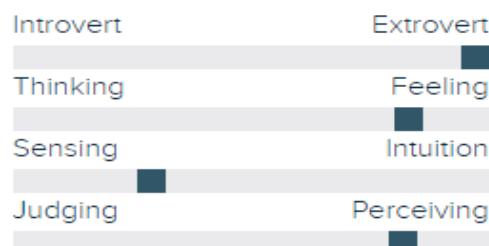
Age: 17

Work: **Student**

Marital Status: **Single**

Location: **Phoenix , Arizona**

Personality



Bio

- Alison is finishing her first year, and she is interested in business. Although she has yet to declare a major, she's considering finance or marketing.
- After watching her parents run a restaurant for years, she knew at a very young age that she also wanted to go into business.

Frustrations

- Making decisions related to her majors.
- Experimenting with new activities in University.
- Time management.

Interests

- Basketball
- Golf
- Making new friend

Goals

- Aspires to start a business in the financial sector.
- Wants to travel the world.



Tom



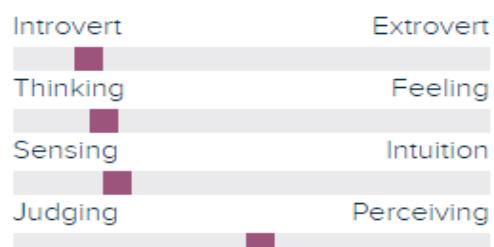
Age: 19

Work: **Student**

Marital Status: **Single**

Location: **Little Rock, Arkansas**

Personality



Bio

- Tom is a 19 year old who likes to achieve bigger goals and aims.
- He is an enthusiast when it comes to studies and singing hip-hop.

Frustrations

- Paying off rent and student loans/Depts.
- Meeting professional deadlines that are lined up consecutively.

Interests

- Playing Football.
- Solving Puzzles with mind games.

Goals

- Experiencing nomadic life by continuous travelling around the globe.
- To be a scientists in the field of medical studies and research.



Minimal Viable Product(MVP):

Registration/Signup

User can register into application.

Login

User can login into the application with valid credentials.

Homepage

User can view the course.

Instructor Page

Instructor can add course through this page.

Course

Add and delete course for the Admin.

Admin Dashboard

Minimal settings page for admin & enrolment of a student.

Logout

User can Logout from the application.



Technologies:

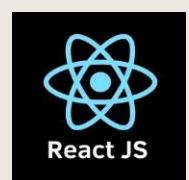
Database:



Back-end:



Front-end:



Communication:



Repository:



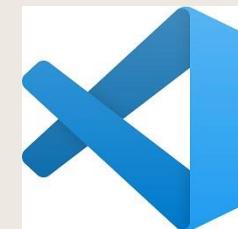
Project Tracking:



Deployments:



Code editor:

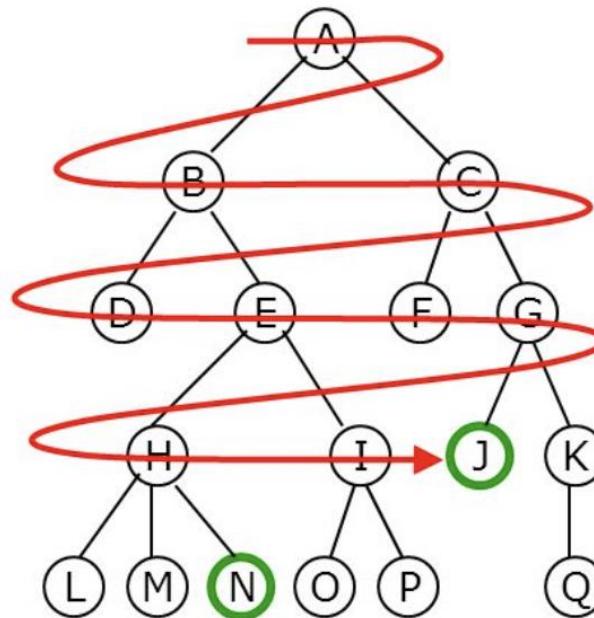


Visual Studio



Algorithm:

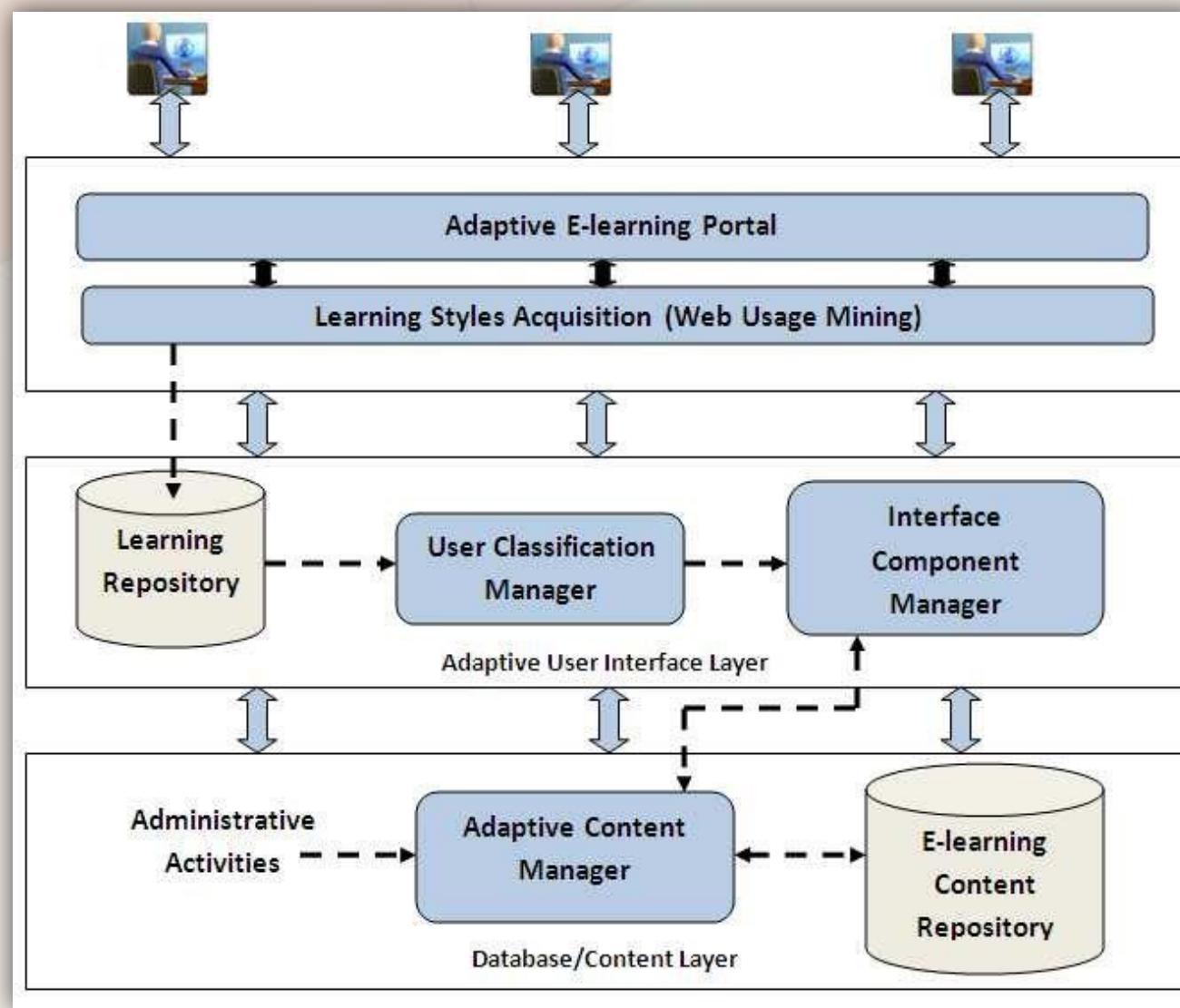
Breadth-first searching



- A **breadth-first** search (**BFS**) explores nodes nearest the root before exploring nodes further away
- For example, after searching **A**, then **B**, then **C**, the search proceeds with **D, E, F, G**
- Nodes are explored in the order **A B C D E F G H I J K L M N O P Q**
- **J** will be found before **N**

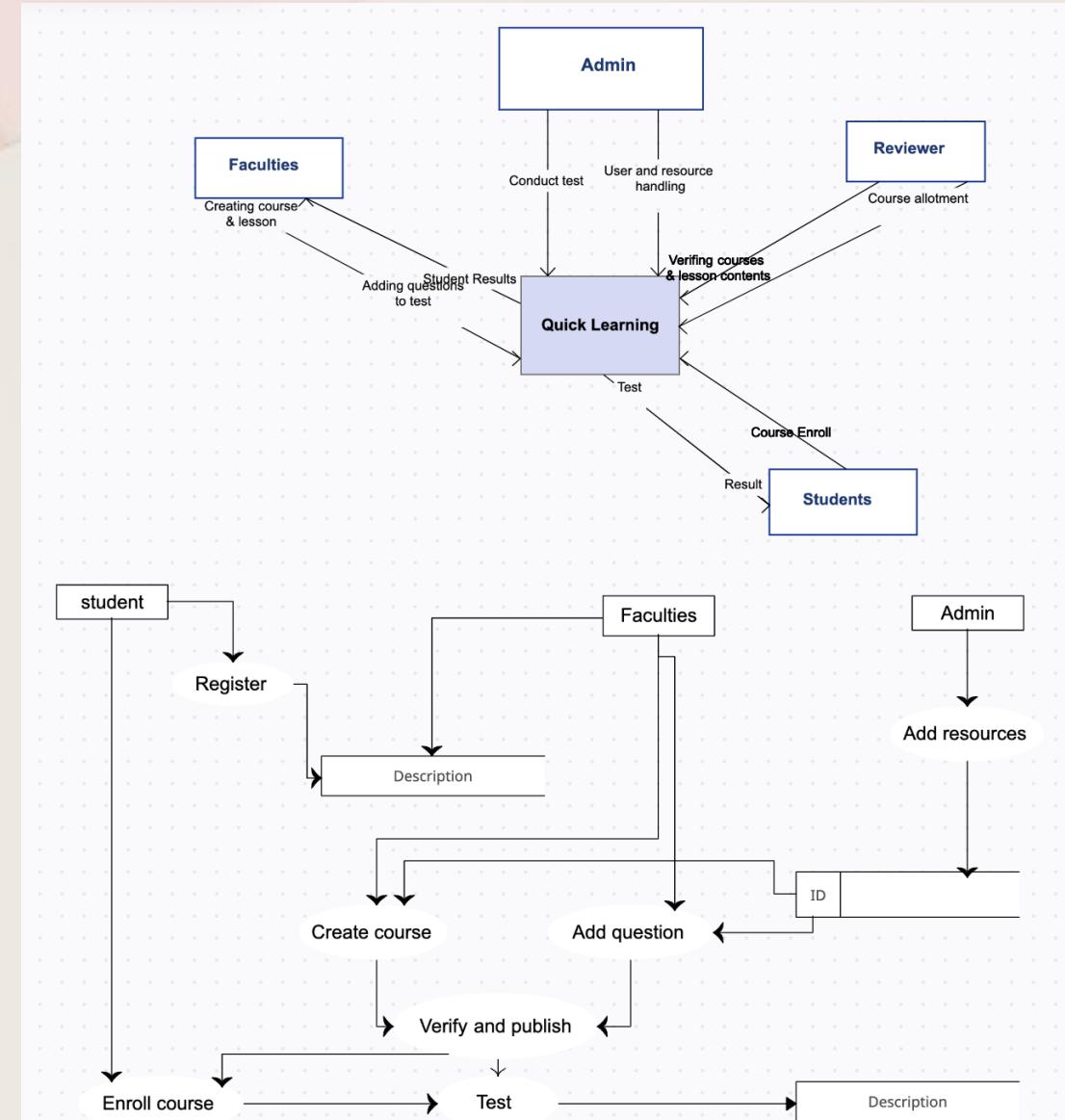


Conceptual Architecture Diagram:

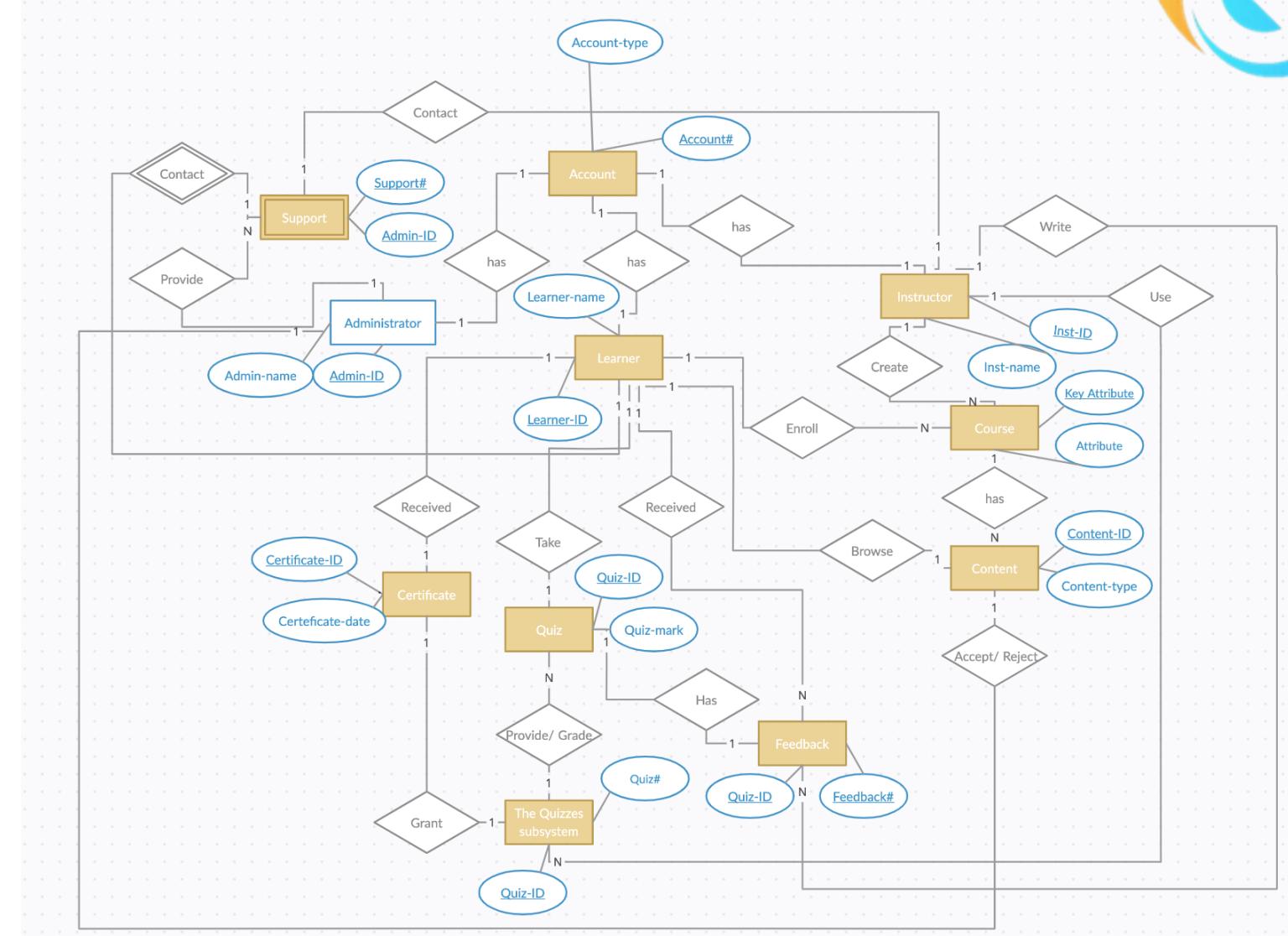




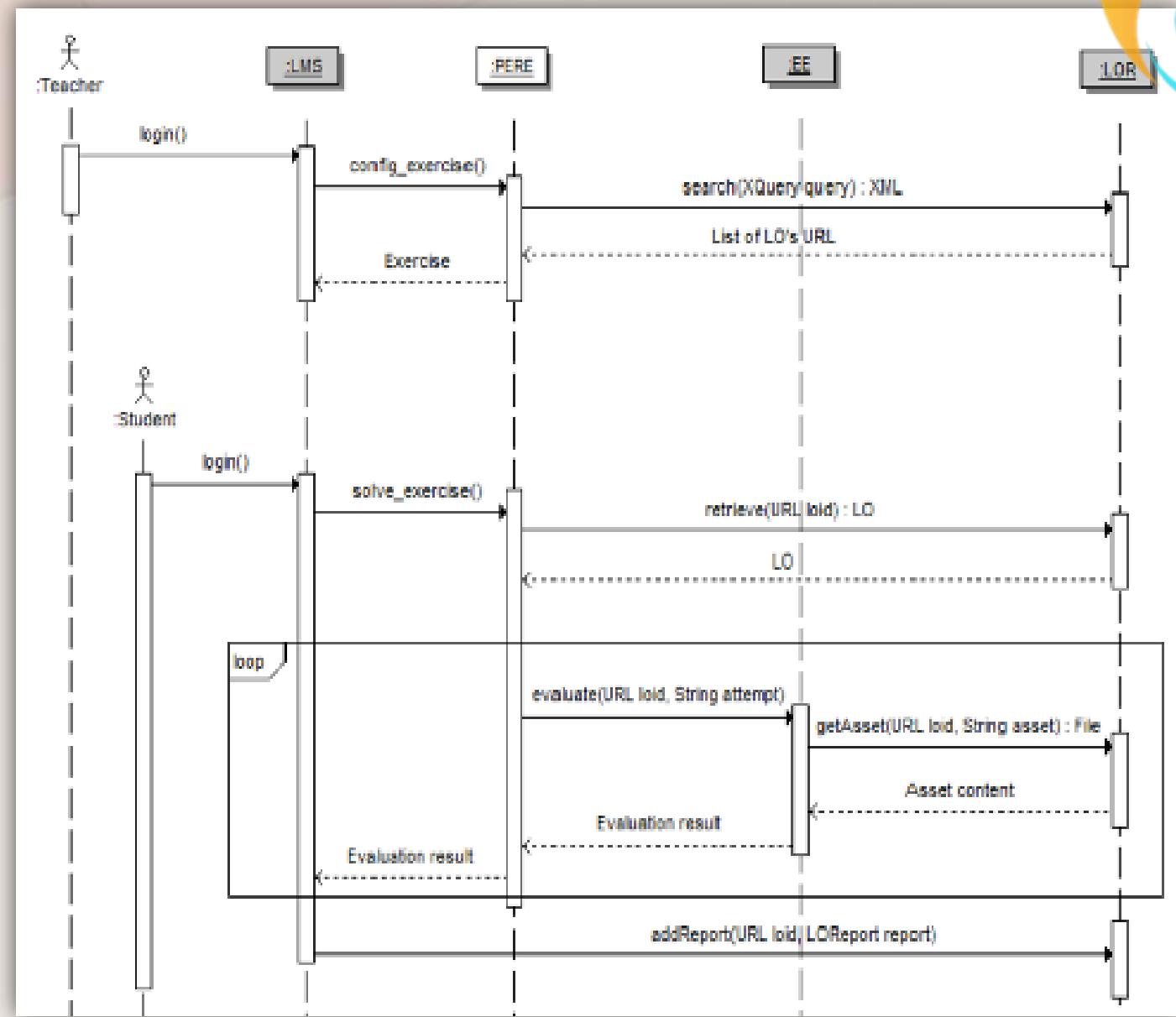
Context Diagram:



ER Diagram:

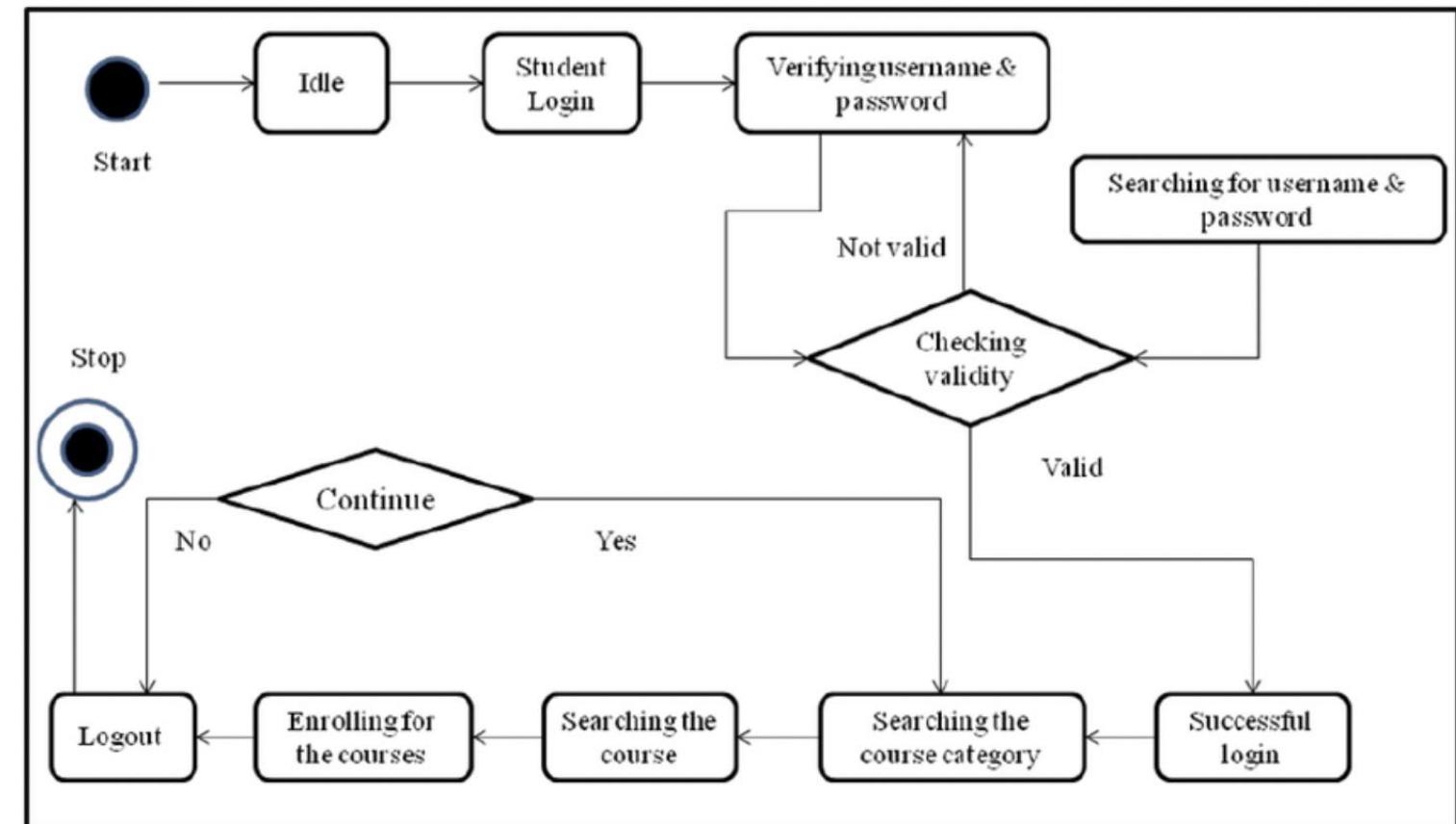


Sequence Diagram



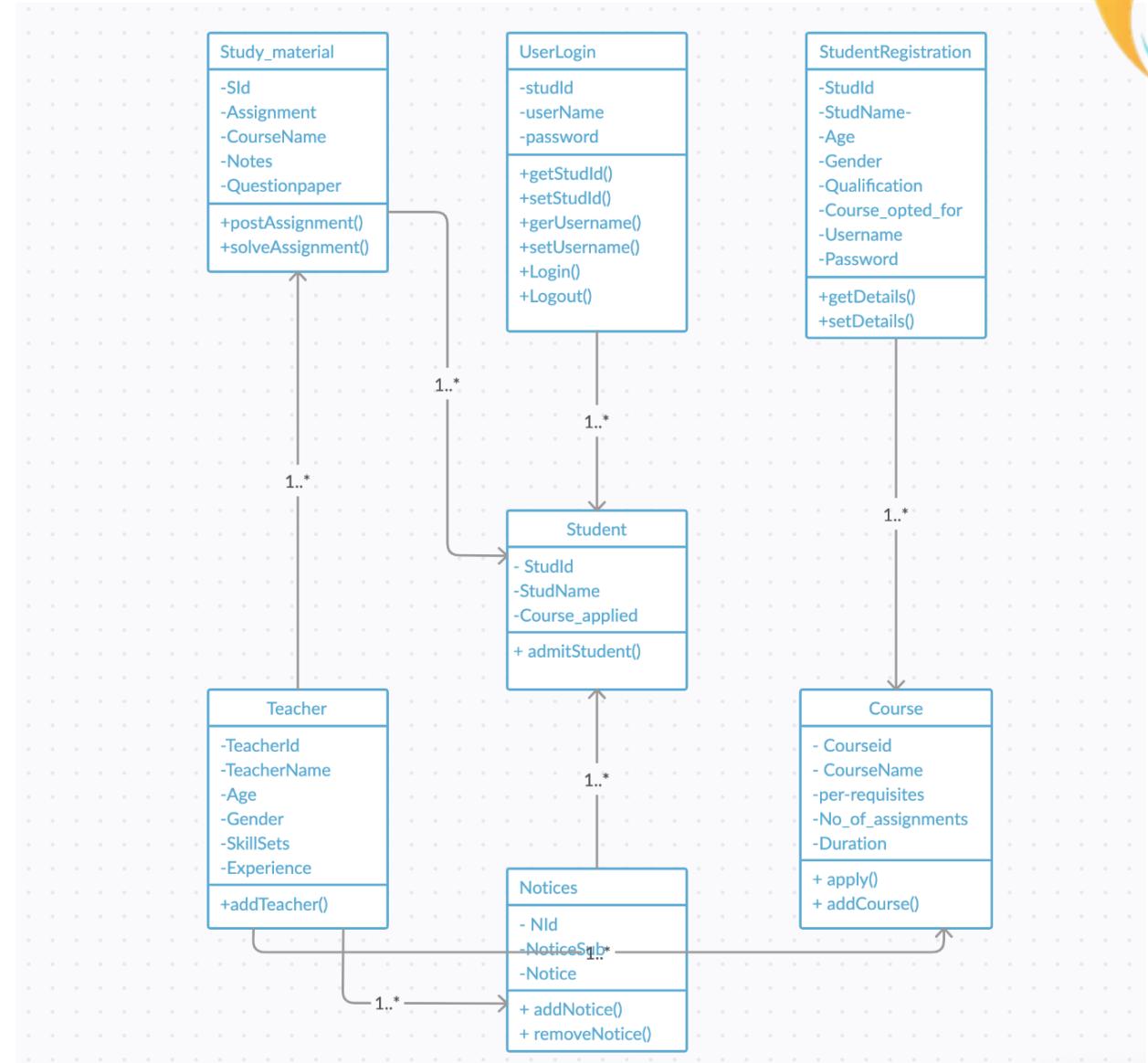


State Diagram :



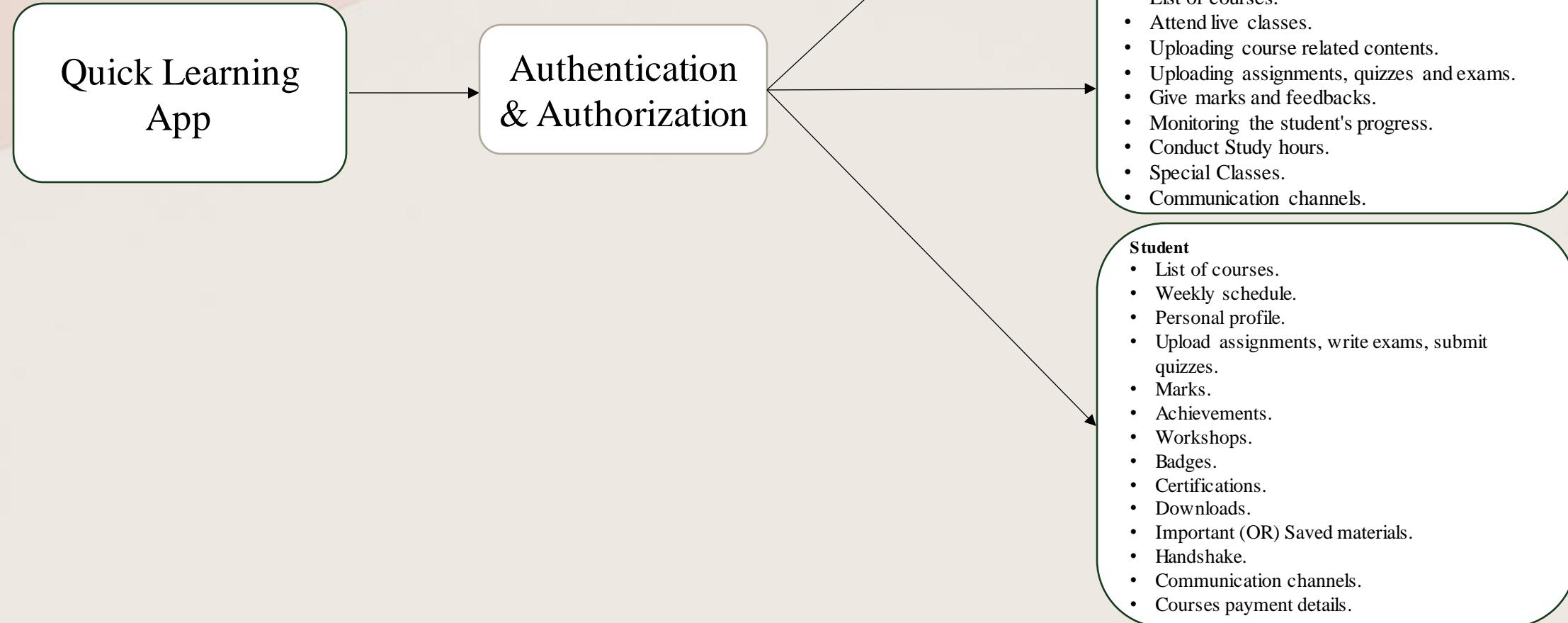
Class Diagram

•
•



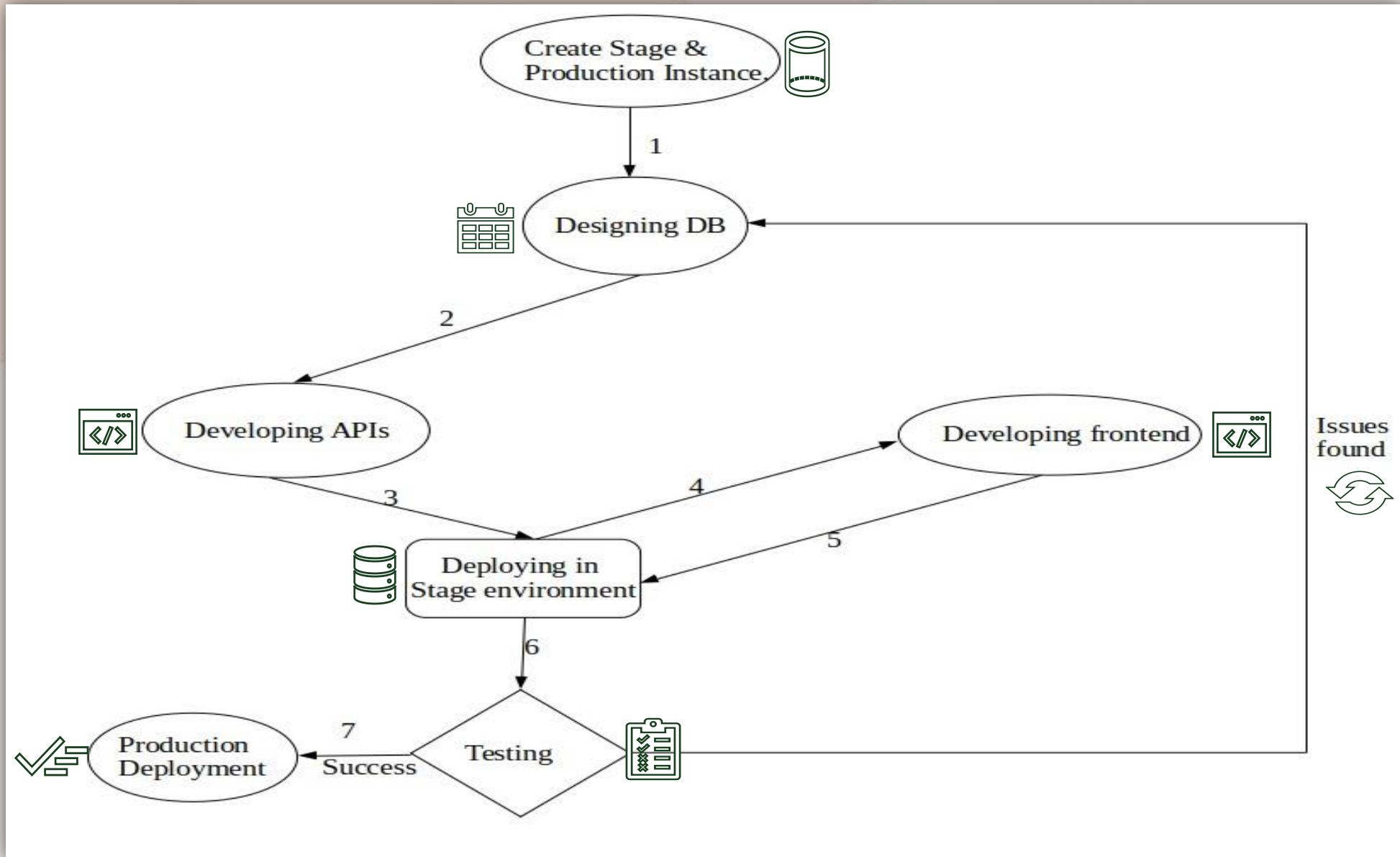


Application Modeling:





Software Development Cycle:





SPRINT 4 RECAP:

- Wishlist.
- Messages.
- Top 10 courses.
- Guest profile.

PROJECT RECAP:

- SignUp
- Login
- Logout
- Create My Account
- Update My Account
- Forgot password
- Add Course
- List Course
- Delete Course
- Course Details
- Course Wishlist
- Messages
- Top 10 courses
- Guest Profile

Product Backlog:



Id	Issue Type	Story	Status	Story Points	Priority
BREW-107	Task	Need to encrypt the password while storing in Database.	To-do	3	Medium
BREW-108	Story	As a Student, I want to do the payment so that I can join or able to see the class of the course that I want to learn.	To-do	8	Medium
BREW-109	Story	As a user I want faster loading pages So that I don't have to wait for the pages to load.	Done	1	High
BREW-131	Story	As a user, I want the content in my language because it is convenient for me.	Done	5	High
BREW-112	Story	As a User, I want to see the notifications, so that I can be able to know the updates.	To-do	3	Low
BREW-117	Story	As a student, I want to check my grades, so that I will know my progress.	To-do	5	Low
BREW-129	Story	As a Professor, I want to upload the materials for the course, so that students can revise everything that I taught.	To-do	5	Medium
BREW-130	Story	As a Student, I want to be able to see the materials, so that I can revise everything.	To-do	3	Medium

Product Backlog:



Id	Issue Type	Story	Status	Story Points	Priority
BREW-132	Story	As a Student, I want to download the materials, so that I can see them offline as well.	To-do	3	Low
BREW-133	Story	As a Professor, I want upload assignments, so that I can check the student's knowledge of my course.	To-do	5	Low
BREW-134	Story	As a Student, I want to submit assignments, so that I professor can see my answers.	To-do	5	Low
BREW-137	Story	As an admin I want to change my system setting. So that I can change the website name	Done	8	High

Sprint 5 Backlog:



UserStories ID	Summary	Story Point
BREW-109	As a user I want faster loading pages So that I don't have to wait for the pages to load	1
BREW-131	As a user I want to view the website in my language So that I can understand it easily	5
BREW-137	As an admin I want to change my system setting. So that I can change the website name	8

User Stories:



User Story Id	Summary	Status
BREW-109	<p>As a user I want faster loading pages So that I don't have to wait for the pages to load</p> <p>Scenario The student wants to visit the next page Given the student is logged in using the correct credentials When the link to the next page is clicked Then the page should be pre-loaded for the user</p>	Done
BREW-131	<p>As a user I want to view the website in my language So that I can understand it easily</p> <p>Scenario The student is from other an country Given the student is logged in using the correct credentials When the student clicks the button to change the language Then the language of the webpage should be changed</p>	Done
BREW-137	<p>As an admin I want to change my system setting. So that I can change the website name</p> <p>Scenario The admin wants to change the name of the website Given the admin is logged in using the correct credentials When the admin goes to system setting Then they can change the change the name of the website</p>	Done

Test Cases:



User Story Id	Test ID	Description	Test Case	Current State	Test Data	Excepted Result	Status
BREW-109	TD01091	Faster loading of pages	User is logged in as the admin/ student / Professor	User logged into the application with valid credentials.	User should be Student/ Admin / Professor	User should be the student/ Professor / Admin	Pass
	TD01092		Pages are loading faster.	User logged into the application as admin / Student / Professor	User should be Student/ Admin / Professor	User should be able load the pages faster	Pass
BREW-131	TD01310	Changing the language	User is logged in as the admin.	User logged into the application with valid credentials.	User should be Admin	User should be the student/ Professor / Admin	Pass
	TD01311		User should be able to change the language.	User logged into the application and go to settings and language settings	User should be Admin	User should be able to change the language	Pass
	TD01312		User is logged in as the Student.	User logged into the application with valid credentials.	User should be Student	User should not be able to change the language	Pass
	TD01313		User is logged in as Professor	User logged into the application with valid credentials.	User should be Professor	User should not be able to change the language	Pass
BREW-137	TD01371	Changing the website Name	User is logged in as the admin.	User logged into the application with valid credentials.	User should be Admin	User should be the student/ Professor / Admin	Pass
	TD01372		User should be able to change the website name	User logged into the application and go to settings and website settings	User should be Admin	User should be able to change the name of the website	Pass
	TD01373		User is logged in as the Student.	User logged into the application with valid credentials.	User should be Student	User should not be able to change the name of the website	Pass
	TD01374		User is logged in as Professor	User logged into the application with valid credentials.	User should be Professor	User should not be able to change the name of the website	Pass

Stories Completed and Stories Not Completed

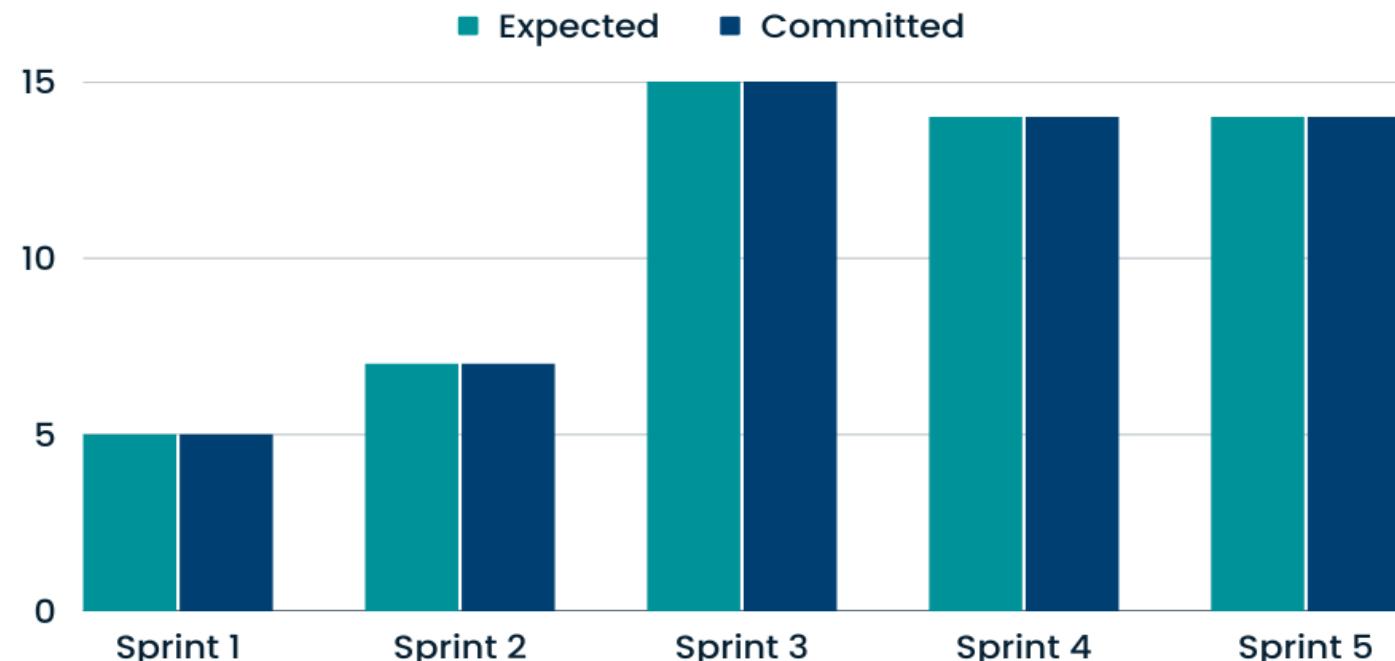


UserStory ID	Summary	Story Point	Status
BREW-109	As a user I want faster loading pages So that I don't have to wait for the pages to load	1	Completed
BREW-131	As a user I want to view the webpage in my language So that I can understand it better	5	Completed
BREW-137	As an admin I want to change my system setting. So that I can change the website name	8	Completed



Team Velocity Chart:

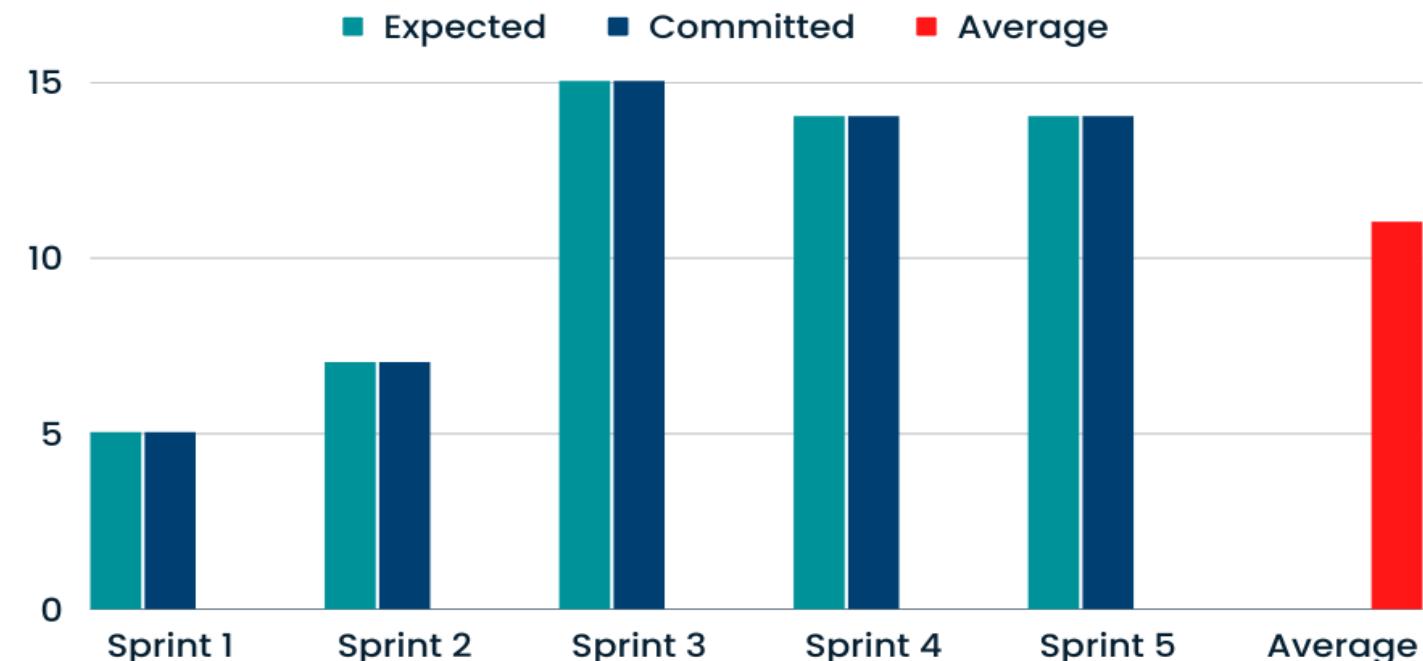
TEAM VELOCITY CHART



Team Historical Velocity (Average):

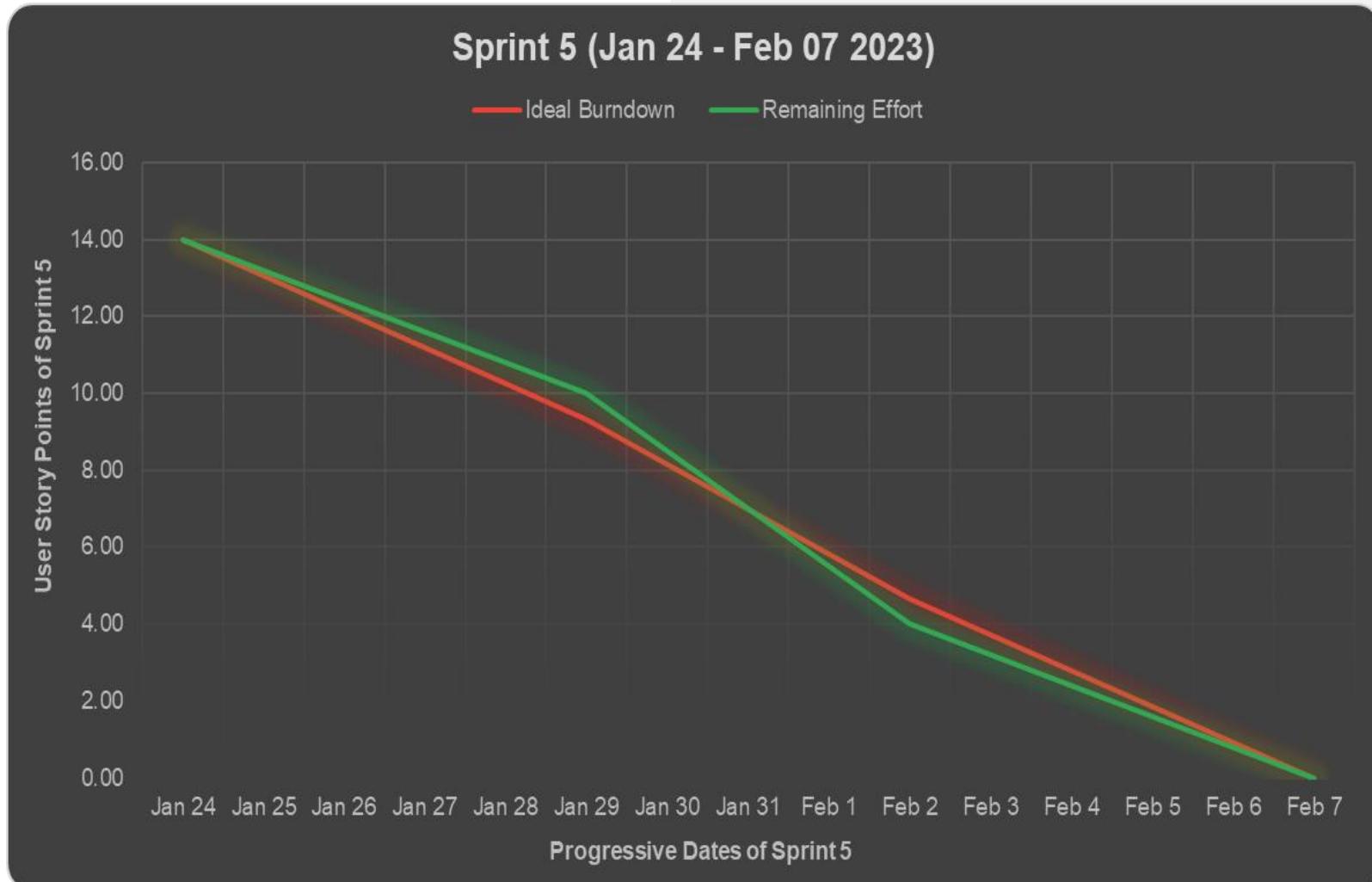


TEAM HISTORICAL VELOCITY CHART





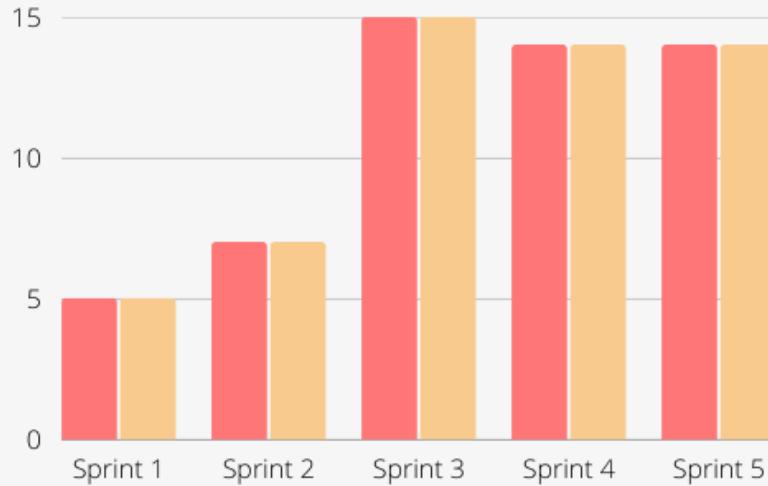
Burndown Chart:





Committed Against Completed Ratio:

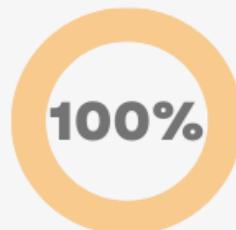
COMPLETED-COMMITTED RATIO

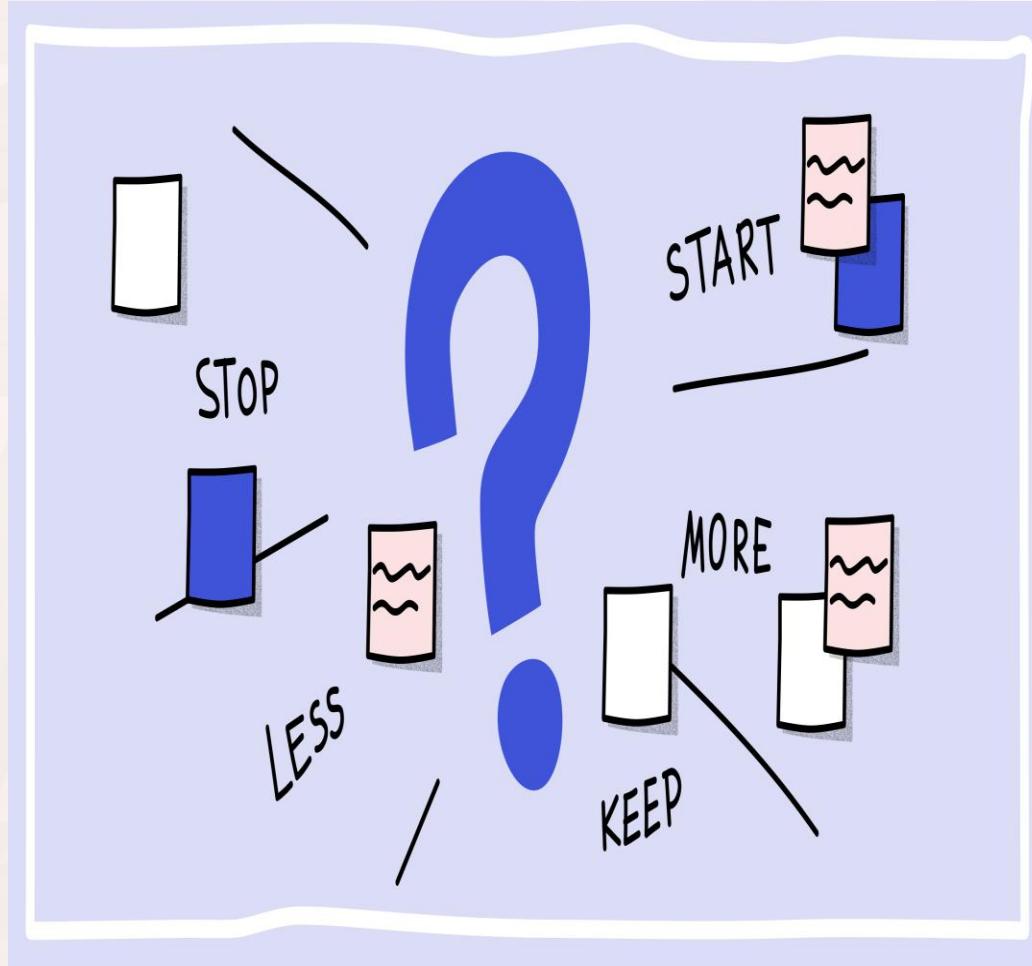


Completed



Committed





Retrospective

What went well?

- Improved team productivity.
- We are excited as the team to move forward and work on deliverables.
- Better communication among the team members.
- Better anticipation of future problems.
- Time Management is efficient.
- All members knew what they had to do — and did it!
- Backlog items are Prioritized and worked accordingly.



What didn't go well?

- We have not reached our testing goals.
- Changing the user stories late in the sprint.
- Unexpected bugs raised as the unit testing is not proper.
- Took more than expected time to complete the User stories.
- Use more accurate ways to estimating the story size.



What needs improvement?

- Get better at estimating
- User testing should be better to avoid the bugs.
- Should have the clear understanding of the User Stories.
- Set time in each sprint for knowledge sharing.
- Time Management should be efficient.



Stories Planned and Committed for Sprint 6:

Story_ID	Stories	Status
BREW-107	Need to encrypt the password while storing in Database.	To-do
BREW-108	As a Student, I want to do the payment so that I can join or able to see the class of the course that I want to learn.	To-do
BREW-112	As a User, I want to see the notifications, so that I can be able to know the updates.	To-do
BREW-132	As a Professor, I want to upload the materials for the course, so that students can revise everything that I taught.	To-do
BREW-133	As a Student, I want to be able to see the materials, so that I can revise everything.	To-do
BREW-134	As a Student, I want to download the materials, so that I will be able to access them offline too.	To-do



Active Courses | Learning Manager X +

http://localhost/QuickLearning/user

Learning Management System Online Visit Website

Henry Wong Instructor

Courses

+ Add New Course

Henry Wong

NAVIGATION

Courses

Instructor Revenue

Settings >

Active Courses: 0

Pending Courses: 0

Draft Courses: 0

Free Courses: 0

Paid Courses: 0

COURSE LIST

Categories: All

Status: All

Price: All

Filter

No Data Found

This screenshot shows the instructor dashboard of the Quick Learning LMS. At the top, there's a header bar with the title 'Active Courses | Learning Manager', a '+' button, and a URL 'http://localhost/QuickLearning/user'. Below the header is a navigation bar with the 'Learning Management System Online' logo, a 'Visit Website' link, and a profile section for 'Henry Wong Instructor' which includes a small photo and the name. The main content area is titled 'Courses' and features a large button '+ Add New Course'. On the left, there's a sidebar with a profile picture of Henry Wong, a 'NAVIGATION' section with links for 'Courses', 'Instructor Revenue', and 'Settings', and a 'COURSE LIST' section with filters for 'Categories', 'Status', and 'Price', followed by a 'Filter' button and a 'No Data Found' message.



Frontend Settings | Learning Man X +

http://localhost/QuickLearning/admin/frontend_settings

Quick Learning Learning Management System Online Visit Website admin admin Admin

Website Settings

WEBSITE SETTINGS

Banner Title* Learn on your schedule

Banner Sub Title* Study any topic, anytime. Explore thousands of courses for the lowest price ever!

About Us

This is about us

Welcome to Academy. It will help you to learn in a new ways

Terms And Condition

Terms and Condition

This is the Terms and condition page for your companies

NAVIGATION

- Dashboard
- Categories >
- Courses
- Students
- Enrolment >
- Report >
- Message
- Settings >
 - System Settings
 - Website Settings
 - Payment Settings
 - Instructor Settings
 - Language Settings
 - Smtp Settings
 - About



Multi Language Settings | Learnin X +

http://localhost/QuickLearning/admin/manage_language

Learning Management System Online Visit Website

admin admin Admin

Manage Language

Language List Add Phrase Add Language

Language	Option
Bengali	Edit Phrase Delete Language
English	Edit Phrase Delete Language

NAVIGATION

- Dashboard
- Categories >
- Courses
- Students
- Enrolment >
- Report >
- Message
- Settings >
 - System Settings
 - Website Settings
 - Payment Settings
 - Instructor Settings
 - Language Settings
 - Smtp Settings
 - About



WIKIPAGE LINK:

[Click here for the WIKIPAGE](#)



HAPPY LEARNING

Thank You

