



# EASY LEARNING ACADEMY

ENJOY A  
PERSONALIZED, FUN,  
AND INTERACTIVE  
LEARNING  
PROCESS AND MAKE  
YOUR BASIC STRONG.



## SUPERVISED BY

**DR. RAZIB HAYAT KHAN**

Assistant Professor , Computer Science  
[razib.khan@aiub.edu](mailto:razib.khan@aiub.edu)

Faculty of Science and Technology (FST)

American International University-Bangladesh  
(AIUB)

## GROUP MEMBERS



MOHAMMED JAMSHED  
ALAM  
19-41727-3



MD. MAHIM TALUKDER  
19-41621-3



ARPITA DATTA  
19-41608-3



SAYED SYFUZZAMAN  
19-41718-3

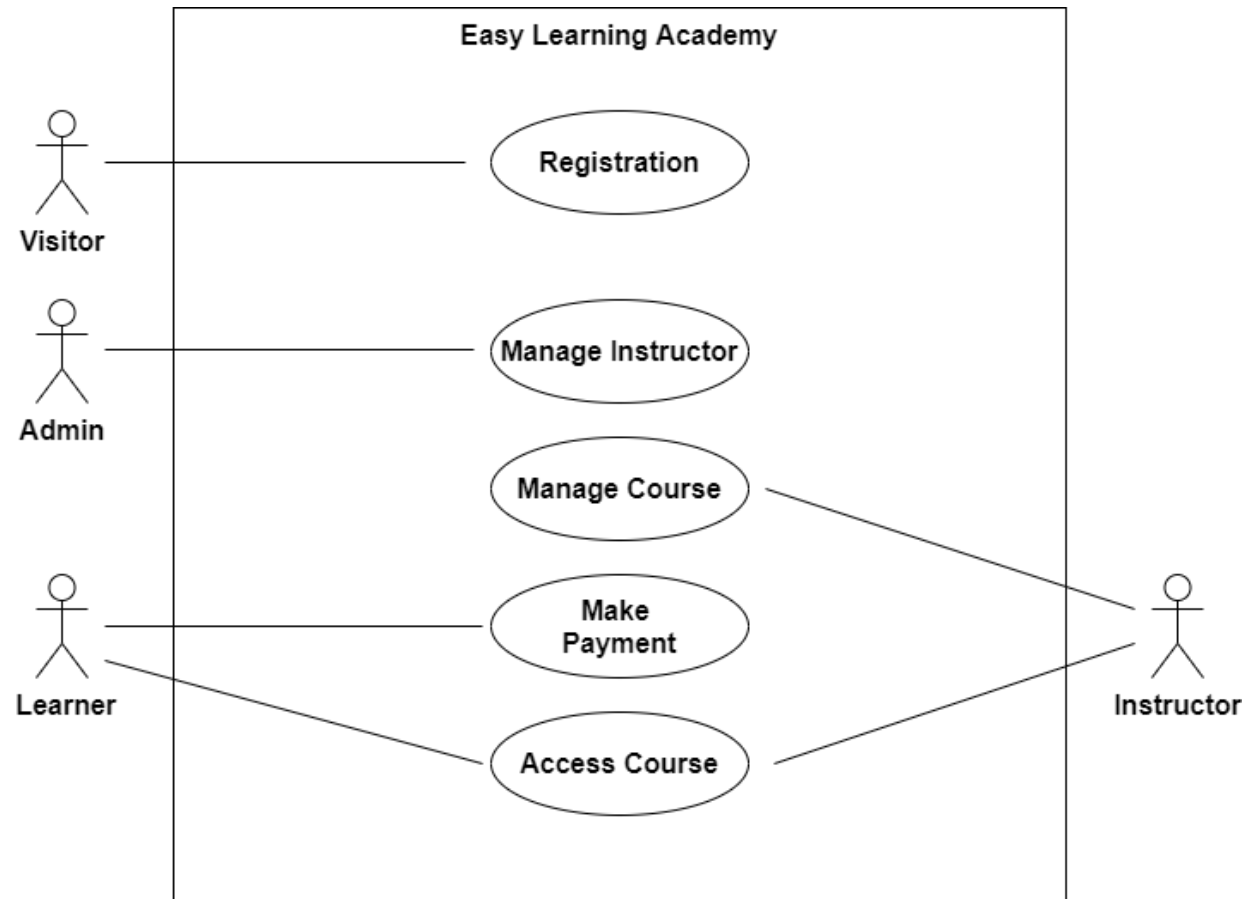
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# PROJECT DESCRIPTION

- Build a platform where someone can take their first steps of learning programming.
- Give interesting learning material to learn programming on their own.
- The goal of our project is to help anyone who wishes to learn programming.
- There will be different types of content such as interactive videos, animations, games etc.
- Inform everyone the importance of programming and how programming affects our day-to-day life.
- We want the next generation of programmers to be better than us, to do better work than us, to reach higher level than us.



# USE CASE



# USER STORY CARD

<b>Title: Registration</b>	<b>Priority: Medium</b>	<b>Estimate: 7 days</b>
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**As a** visitor  
**I want to** register either as an instructor or a learner  
**So that** I can teach courses or access and learn from courses.

## Acceptance Criteria:

**Given** a visitor is studying or has completed studying in Computer Science or related fields  
**Then** they can join the platform as an instructor.

**If a** visitor is in or above class 8  
**When** they submit all of the required information  
**Then** they can join the platform as a learner.

<b>Title: Manage Instructor</b>	<b>Priority: High</b>	<b>Estimate: 14 days</b>
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**As an** admin  
**I want to** manage all aspects of an instructor  
**So that I can** do tasks such as approving instructors, assigning courses, giving payments etc.

## Acceptance Criteria:

**Given** an admin has the correct credentials  
**Then when** they log in as admins  
**Then** they will have access to a menu where they can choose different options to complete different management tasks.

<b>Title: Manage Course</b>	<b>Priority: High</b>	<b>Estimate: 14 days</b>
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**As an** instructor  
**I want to** manage courses  
**So that I** can add new materials, arrange and grade quizzes, see student's progress etc.

## Acceptance Criteria:

**If an** instructor has been approved by an admin  
**Then** when they log in they can access the instructor features such as adding new materials, helping the students who requested for help, managing quizzes etc.

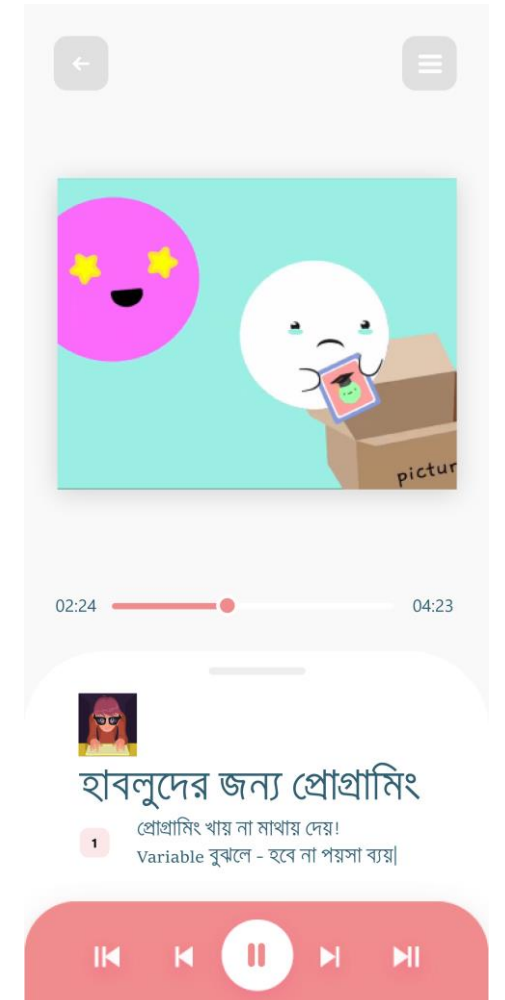
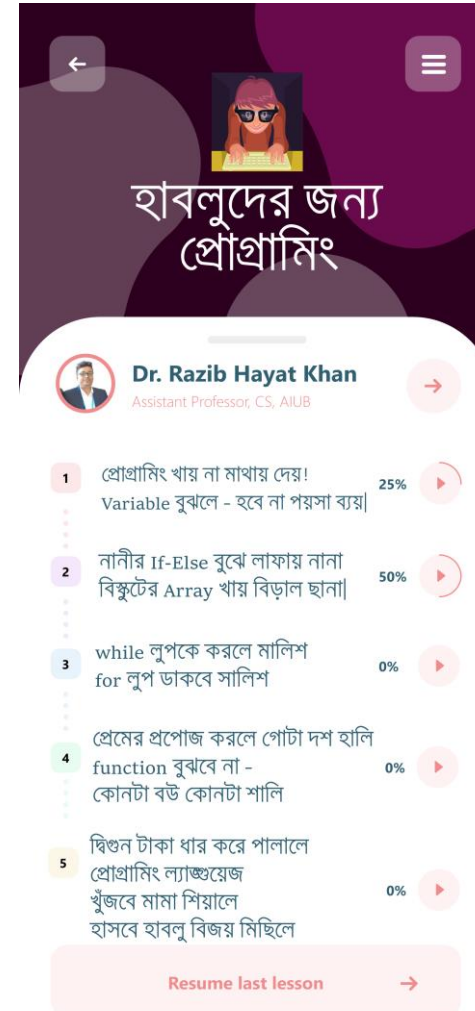
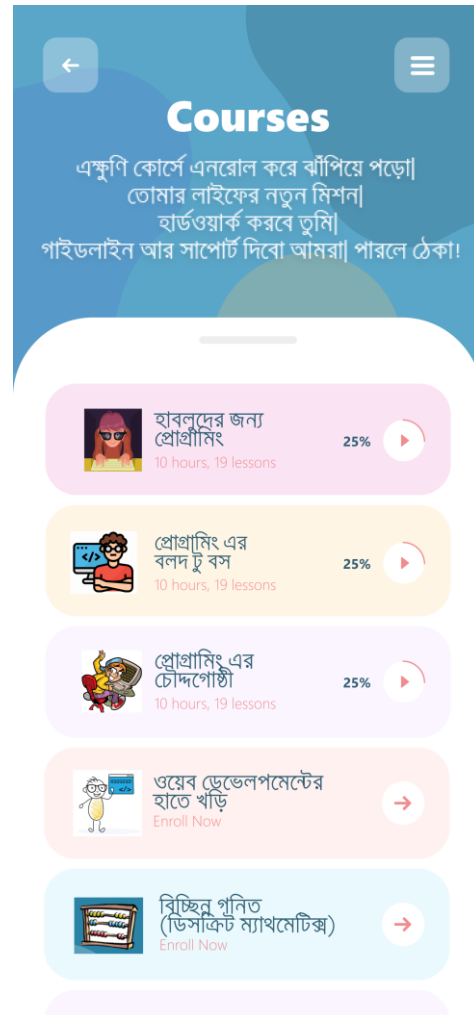
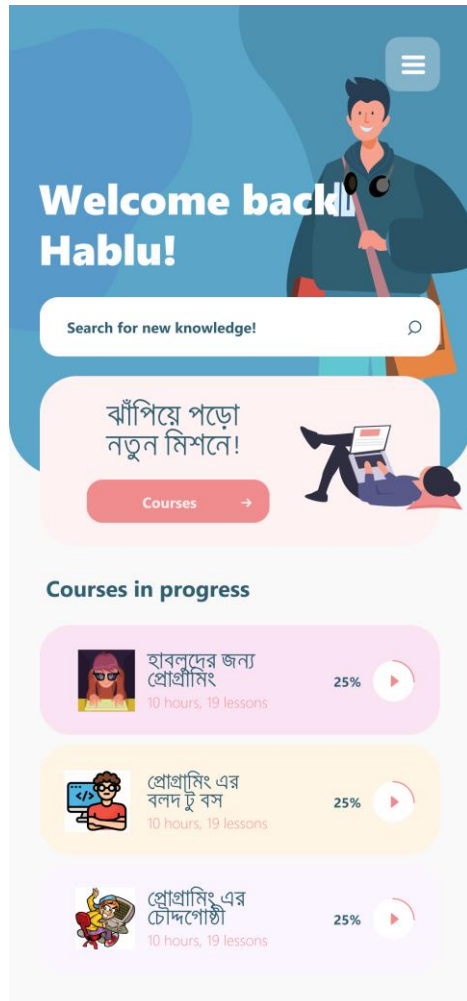
# USER STORY CARD

<b>Title: Access Course</b>	<b>Priority: High</b>	<b>Estimate: 14 days</b>
<p>As a learner I want to access courses So that I can learn programming.</p>		
<p><b><u>Acceptance Criteria:</u></b></p> <p>If a learner has completed payment When they login Then they can view all the materials provided, attend quizzes, check their study time. They can also post any questions they have where they can receive help from the instructors.</p>		

<b>Title: Payment</b>	<b>Priority: Medium</b>	<b>Estimate: 7 days</b>
<p>As a learner admin I want to make payment So that I can access courses.</p>		
<p><b><u>Acceptance Criteria:</u></b></p> <p>If a learner has completed registration When if they choose the option to make payment Then they can select from different methods of payment.</p>		

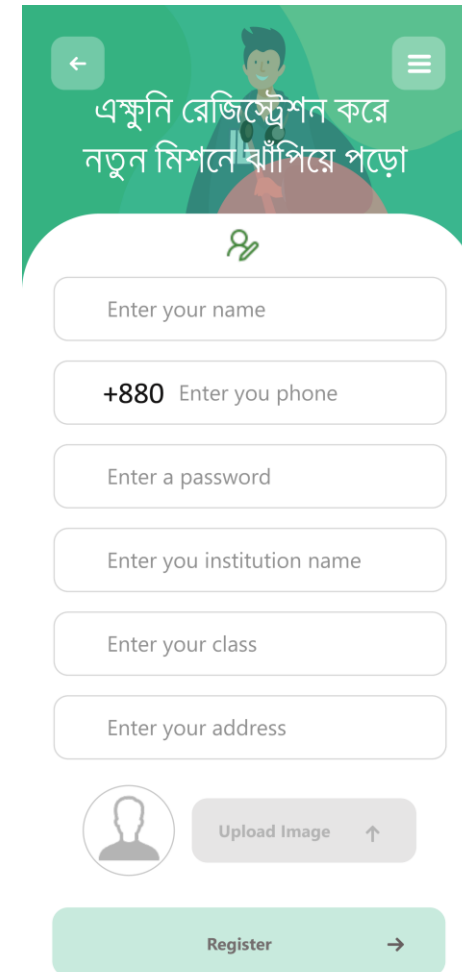
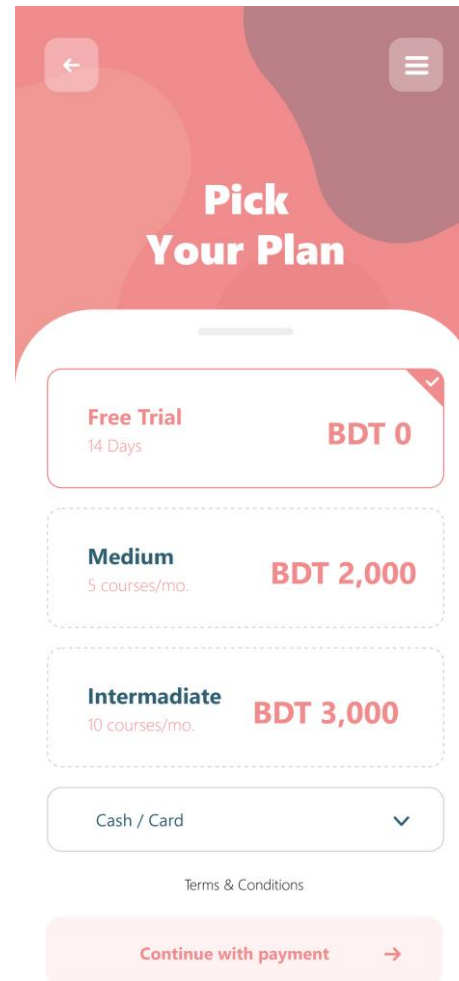
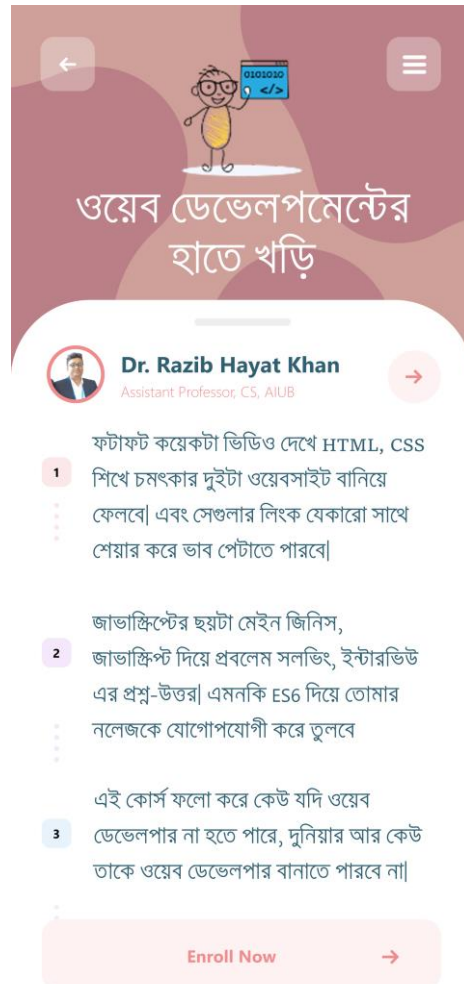


# USER INTERFACE DESIGN

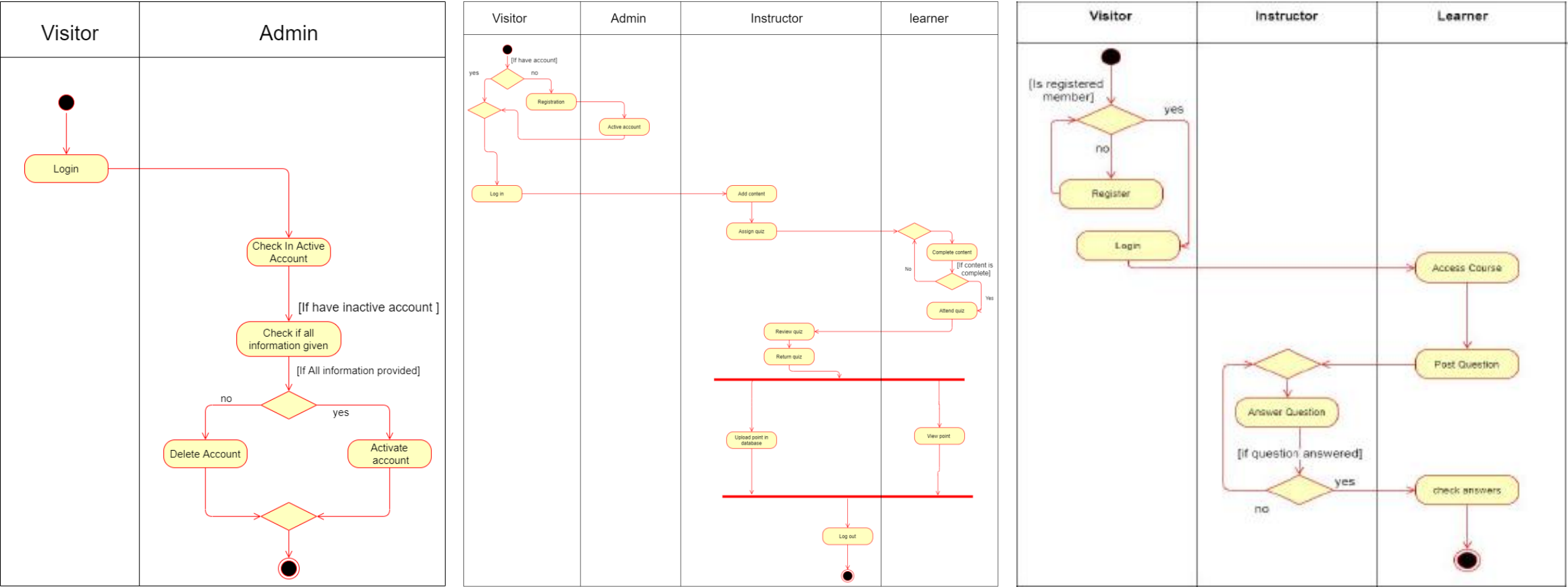




# USER INTERFACE DESIGN



# ACTIVITY DIAGRAM



## Default dashboard

★ Add gadget Change layout ⋮

### ⋮ Pie Chart: Easy Learning Academy ⌵ ⌶ ⋮



#### Sprint

Total Issues: 12

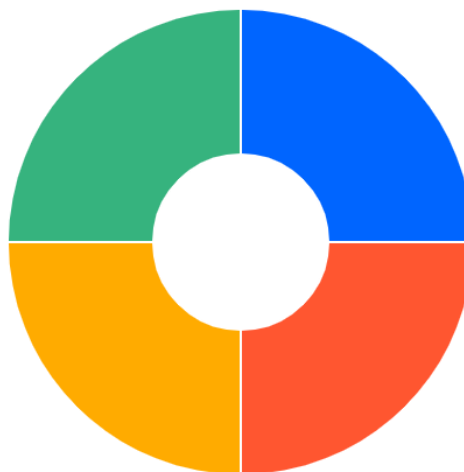
ELA Sprint 3	3
EL Sprint 1	2
ELA Sprint 4	2
ELA Sprint 5	2
ELA Sprint 6	2
ELA Sprint 2	1

### ⋮ Projects ⌵ ⋮

Easy Learning Academy (ELA)  
Lead MD Mahim Talukder

1-1 of 1

### ⋮ Pie Chart: Easy Learning Academy ⌵ ⌶ ⋮



#### Assignee

Total Issues: 12

Arpita Datta	3
MD Mahim Talukder	3
Mohammed Jamshed Alam	3
Sayed Syfuzzaman	3

## Issues

Export issues ▾

Go to advanced search

LIST VIEW ≡

DETAIL VIEW ≡



Search issues



Project: Easy Learning Academy ▾

Assignee ▾

Reporter ▾

Status ▾

Type ▾

Status Category ▾


BASIC

JQL

Type	Key	Summary	Assignee	Reporter	P	Status	Created ↓	
<input checked="" type="checkbox"/>	ELA-16	Project Schedule and Budgeting 2	Sayed Syfuzzaman	MD Mahim Talukder	⬆	DONE ▾	Aug 1, 2021	...
<input checked="" type="checkbox"/>	ELA-15	Project Schedule and Budgeting 1	MD Mahim Talukder	MD Mahim Talukder	⬆	DONE ▾	Aug 1, 2021	
<input checked="" type="checkbox"/>	ELA-14	Class Diagram 2	Arpita Datta	MD Mahim Talukder	⬆	DONE ▾	Aug 1, 2021	
<input checked="" type="checkbox"/>	ELA-12	Class Diagram 1	Mohammed Jamshed Alam	MD Mahim Talukder	⬆	DONE ▾	Jul 12, 2021	
<input checked="" type="checkbox"/>	ELA-8	Design Activity Diagram-2	Mohammed Jamshed Alam	MD Mahim Talukder	⬆	DONE ▾	Jul 8, 2021	
<input checked="" type="checkbox"/>	ELA-7	Design Activity Diagram-1	MD Mahim Talukder	MD Mahim Talukder	⬆	DONE ▾	Jul 8, 2021	
<input checked="" type="checkbox"/>	ELA-6	Design User Story Card-2	Sayed Syfuzzaman	MD Mahim Talukder	⬆	DONE ▾	Jul 8, 2021	
<input checked="" type="checkbox"/>	ELA-5	Design User Story Card-1	Arpita Datta	MD Mahim Talukder	⬆	DONE ▾	Jul 8, 2021	
<input checked="" type="checkbox"/>	ELA-4	User Interface Design	Sayed Syfuzzaman	MD Mahim Talukder	⬆	DONE ▾	Jul 8, 2021	
<input checked="" type="checkbox"/>	ELA-3	Design Use Case	MD Mahim Talukder	MD Mahim Talukder	⬆	DONE ▾	Jul 8, 2021	
<input checked="" type="checkbox"/>	ELA-2	Requirement analysis	Mohammed Jamshed Alam	MD Mahim Talukder	⬆	DONE ▾	Jul 8, 2021	
<input checked="" type="checkbox"/>	ELA-1	Idea Generation	Arpita Datta	MD Mahim Talukder	⬆	DONE ▾	Jul 8, 2021	

# JIRA

## Group 6

 Open team

Picture this. It's next week. You're having a big team meeting. But wait - everyone's already aligned. Why? Because you filled in an amazing description right here.

Add people



### Members

4 members



MD Mahim Talukder  
CS Engineer



Arpita Datta  
CS Engineer



Mohammed Jamshed Alam  
Software Engineer



Sayed Syfuzzaman  
Software Engineer

## Worked on



ELA-16 Project Schedule and Budgeting 2

Easy Learning Academy · You and Sayed Syfuzzaman have both worked on this



ELA-12 Class Diagram 1

Easy Learning Academy · You, Arpita Datta and Mohammed Jamshed Alam have all worked on this



ELA-6 Design User Story Card-2

Easy Learning Academy · You, Arpita Datta and Sayed Syfuzzaman have all worked on this



ELA-15 Project Schedule and Budgeting 1

Easy Learning Academy · You and Arpita Datta have both worked on this



ELA-1 Idea Generation

Easy Learning Academy · You and Arpita Datta have both worked on this



ELA-2 Requirement analysis

Easy Learning Academy · You and Mohammed Jamshed Alam have both worked on this



ELA-8 Design Activity Diagram-2

Easy Learning Academy · You and Mohammed Jamshed Alam have both worked on this



ELA-4 User Interface Design

Easy Learning Academy · You and Sayed Syfuzzaman have both worked on this



ELA-3 Design Use Case

Easy Learning Academy · You and Arpita Datta have both worked on this



ELA-7 Design Activity Diagram-1

Easy Learning Academy · You and Arpita Datta have both worked on this

## Links



# GIT

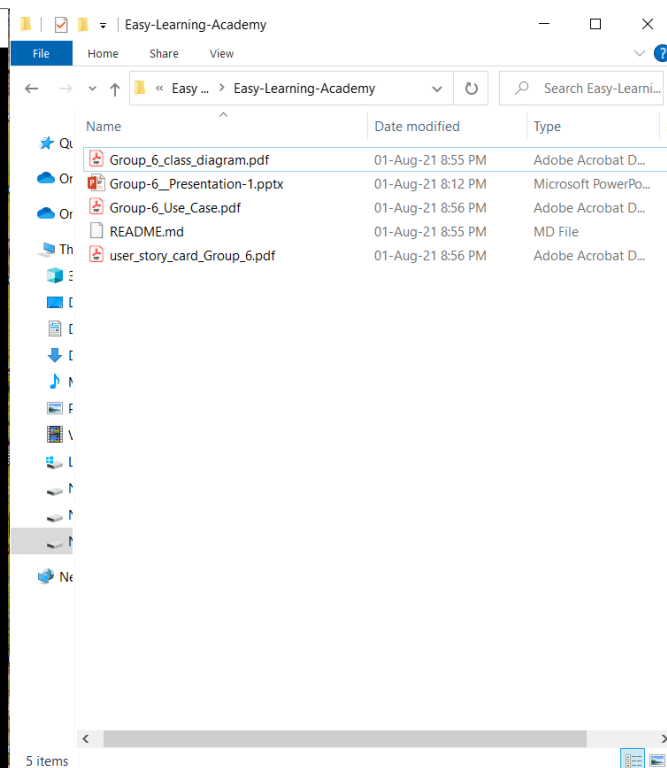
```
MINGW64/f/BSc in CSE/Summer 20-21/Software Engineering/Easy Learning Academy/Easy-Learning-Academy
ador0@DESKTOP-323MOJQ MINGW64 /f/BSc in CSE/Summer 20-21/Software Engineering/Easy Learning Academy/Easy-Learning-Academy (main)
$ git add .

ador0@DESKTOP-323MOJQ MINGW64 /f/BSc in CSE/Summer 20-21/Software Engineering/Easy Learning Academy/Easy-Learning-Academy (main)
$ git status
On branch main
Your branch is up to date with 'origin/main'.

Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
        new file:   Group-6_Use_Case.pdf
        new file:   Group-6__Presentation-1.pptx
        new file:   Group_6_class_diagram.pdf
        new file:   user_story_card_Group_6.pdf

ador0@DESKTOP-323MOJQ MINGW64 /f/BSc in CSE/Summer 20-21/Software Engineering/Easy Learning Academy/Easy-Learning-Academy (main)
$ git commit -m "First Commit"
[main d5f1b42] First Commit
4 files changed, 0 insertions(+), 0 deletions(-)
create mode 100644 Group-6_Use_Case.pdf
create mode 100644 Group-6__Presentation-1.pptx
create mode 100644 Group_6_class_diagram.pdf
create mode 100644 user_story_card_Group_6.pdf

ador0@DESKTOP-323MOJQ MINGW64 /f/BSc in CSE/Summer 20-21/Software Engineering/Easy Learning Academy/Easy-Learning-Academy (main)
$ git push
Enumerating objects: 7, done.
Counting objects: 100% (7/7), done.
Delta compression using up to 8 threads
Compressing objects: 100% (6/6), done.
Writing objects: 100% (6/6), 6.50 MiB | 157.00 KiB/s, done.
Total 6 (delta 0), reused 0 (delta 0), pack-reused 0
To https://github.com/sayedsyfuzzaman/Easy-Learning-Academy.git
   e3d2e06..d5f1b42  main -> main
```



sayedsyfuzzaman / Easy-Learning-Academy

<> Code Issues Pull requests Actions Projects Wiki

main Go to file Add file Code

sayedsyfuzzaman First Commit 5 minutes ago 2

Group-6_Use_Case.p...	First Commit	5 minutes ago
Group-6__Presentati...	First Commit	5 minutes ago
Group_6_class_diagr...	First Commit	5 minutes ago
README.md	Initial commit	12 minutes ago
user_story_card_Gro...	First Commit	5 minutes ago

README.md



# CLASS DIAGRAM

## Admin

<b>&lt;&lt;User&gt;&gt; Admin</b>
<b>+ ManageInstructor(instructorobj: Instructor): void</b> <b>+ ActivateAccount(instructorobj: Instructor): void</b>

## Visitor

<b>&lt;&lt;User&gt;&gt; Visitor</b>
<b>- name: string</b> <b>- phoneNO: string</b> <b>- currentClass: string</b> <b>- password: string</b> <b>- email: string</b>
<b>+ RegisterAsInstructor(): void</b> <b>+ RegisterAsLearner(): void</b> <b>+ Login(): void</b>

## Learner

<b>&lt;&lt;User&gt;&gt; Learner</b>
<b>- name: string</b> <b>- email: string</b> <b>- password: string</b> <b>- currentClass: string</b> <b>- phoneNO: string</b> <b>- learnerID: string = none {assigned by system}</b>
<b>+ setName(name : string)</b> <b>+ getName(): string</b> <b>+ setEmail(email: string)</b> <b>+ getEmail(): string</b> <b>+ setPassword(password: string)</b> <b>+ getPassword(): string</b> <b>+ setCurrentClass(currentClass: string)</b> <b>+ getCurrentClass(): string</b> <b>+ setPhoneNO(phoneNO: string)</b> <b>+ getPhoneNO(): string</b> <b>+ setLearnerID()</b> <b>+ getLearnerID(): string</b> <b>+ AccessCourse(): void</b> <b>+ AccessCourseMaterial(): void</b> <b>+ AttendQuiz(): void</b> <b>+ PostQuestion(): void</b> <b>+ CheckAnswers(): void</b>

## Instructor

<b>&lt;&lt;User&gt;&gt; Instructor</b>
<b>- name: string</b> <b>- email: string</b> <b>- password: string</b> <b>- currentClass: string</b> <b>- phoneNO: string</b> <b>- instructorID: string = none {assigned by system}</b>
<b>+ setName(name : string)</b> <b>+ getName(): string</b> <b>+ setEmail(email: string)</b> <b>+ getEmail(): string</b> <b>+ setPassword(password: string)</b> <b>+ getPassword(): string</b> <b>+ setCurrentClass(currentClass: string)</b> <b>+ getCurrentClass(): string</b> <b>+ setPhoneNO(phoneNO: string)</b> <b>+ getPhoneNO(): string</b> <b>+ setLearnerID()</b> <b>+ getLearnerID(): string</b> <b>+ ManageCourse(): void</b> <b>+ ManageCourseMaterial(): void</b> <b>+ AccessCourse(): void</b> <b>+ CheckQuiz(): void</b> <b>+ AnswerQuestion(): void</b>

# PROJECT SCHEDULE SUMMARY

Project Schedule Summary

A : Requirements Analysis 1 B : Requirements Analysis 2 C : Requirements Analysis 3 D : Requirements Analysis 4 E : Designing 1			F : Designing 2 G : Designing 3 H : Designing 4 I : Create GIT repository J : Coding Module 1 K : Coding Module 2			L : Coding Module 3 M : Testing N : Implementation O : Operation P : Documentation		
Task: Person \ Week	1	2	3	4	5	6	7	8
A: Arpita Datta								
B: Mahim Talukdar								
C: Sayed Syfuzzaman								
D: Mohammed Jamshed Alam								
E: Arpita Datta								
F: Mahim Talukdar								
G: Sayed Syfuzzaman								
H: Mohammed Jamshed Alam								

# PROJECT SCHEDULE SUMMARY

[illegible]

# BUDGET

## Constructive Cost Model:

Project Type : Organic

Coefficient<sub><Effort Factor></sub> : 2.4 [P=1.05 ; T=0.38]

SLOC = 10,000 Lines

Person Month, PM =  $(2.4 * 10^{1.05}) = 26.928$

Development Time, DM =  $(2.5 * 26.928^{0.38}) = 8.738 = 9 \text{ Months} = 1584 \text{ Working}$

Hour Required People, ST = PM/DM = 3.082 = 3 People

Field of Expense	Amount
Developer Salary	792,000/-
Requirement Analysis Expense	52,800/-
Transportation Cost	15,000/-
Training & Hardware Expenses	125,000/-
Rent Expenses (for 9 months)	135,000/-
Utilities (for 9 Months)	25,000/-
Maintenance Expense (for 9 Months)	72,000/-
Project Manager wage	225,000/-
Project Accountant wage	45,000/-
Profit [25%]	371,700/-
<b>Total</b>	<b>1,858,500/-</b>

# SUMMARY

- We are trying to help students of young age who want to learn programming
- Ensure everyone has the right tools and materials
- The goal of our project is to help anyone who wishes to learn programming.
- Reach out to as many people we can and share the knowledge of programming

