# Software Design and Analysis - Fall 2020 Assignment 02

### Group:

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# **Project Summary:**

'Nu-demy' is a udemy-like android application for students who can have all of their university resources in one place. It will have all the content (pdfs, videos etc) for all the courses of all the semesters.

#### Usecases:

**User Registration** 

User Login

View reviews

View My courses

Opt free courses

Opt paid courses

Add to My Courses

Opt courses by faculty

Watch/Download Videos

View/Download PDFs

Download coding files

Download assignments

View/Download tasks

Upload course content

Online guide - Ask

Online guide - Answer

View FAQs

Update settings

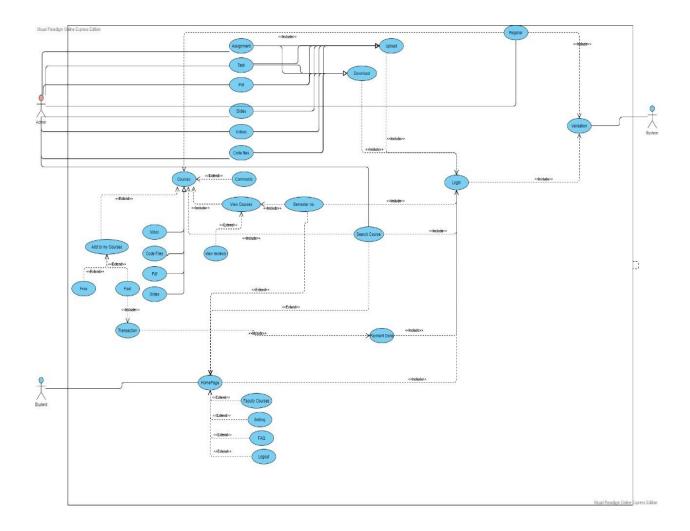
Update user profile

User logout

## Optional:

Sale on paid courses Switch to Dark Mode

Search Course



(for clearer view, there are separate diagrams in zip folder)

# **Use Case Descriptions:**

# 1. User Registration

**Goal :** successful registration of student **Preconditions:** valid email address

Successful End Condition: student registered

Failed End Condition: unsuccessful student registration

Primary Actors: student Secondary Actors: admin

**Trigger:** student attempts to register **Main Flow:** - User starts the app

- User clicks register account

- Successful registration

Alternate Flow: - User starts the app

- User attempts to register

- Invalid email address

### - Registration fails

# 2. Login

Goal: log in to the system

Preconditions: valid email and password
Successful End Condition: Logged in
Failed End Condition: student failed to log in

Primary Actors: Student/Admin Secondary Actors: System Trigger: user attempts to login Main Flow: - user attempts to log in

validation successful

- user is directed to homepage/dashboard

Alternate Flow: - user attempts to log in

wrong passworduser is not logged in

#### 3. View Reviews

**Goal**: to view reviews given by students **Preconditions**: admin/student logged in

Successful End Condition: view reviews by students

Failed End Condition: unable to view reviews

Primary Actors: student Secondary Actor: admin Trigger: course exists

Main FLow: - user opens a course

- user reads reviews

Alternate Flow: - course doesn't exist

# 4. View My Courses:

**Goal**: view all the courses student has added to My Courses

**Precondition**: Student logged in

Successful End Condition: view My Courses list

Failed End Condition: cannot view my courses; not logged in

Primary Actors:Student Secondary Actor: System

**Trigger:** - user views My courses by clicking My courses tab

Main Flow: - user logs into the system

- User views the list of all courses

**Alternate Flow**: - user can't view My courses (not logged in)

# 5. Opt free courses:

Goal: to register free courses

**Precondition**: student successfully logins

Successful end condition: successful registration

Failed end condition: failed registration

Primary actors: student Secondary actors: system

**Trigger:** student selects a free course

Main flow: - student logins

student selects a free coursestudent successfully registers

Alternate flow: - student logins

- free courses not found

## 6. Opt paid courses:

Goal: to register paid courses

**Precondition:** successful payment transfer

Successful end condition: successful registration of paid courses

Failed end condition: unsuccessful registration

Primary actors: student Secondary actors: system

**Trigger:** student selects a paid course

Main flow: - student logins

student selects a paid coursestudent pays for the coursesuccessful registration

Alternate flow: - student logins

- student selects a paid course

- student tries to pay but transaction fails

# 7. Add to My Courses:

**Goal:** to add selective courses to My Courses (favorites)

**Precondition:** student logins

Successful end condition: course successfully added to My Courses

Failed end condition: course not added to My Courses

Primary actors: student
Secondary actors: system

Trigger: student selects a course

Main flow: - student logins

- student selects a course

- selected course successfully added to My Courses

Alternate flow: - student logins

- student selects a course

- application crashes

- selected course not added to My Courses

# 8. Opt courses offered by faculty:

**Goal:** to register course offered by faculty **Precondition:** successful login by student

Successful end condition: successful course registration

Failed end condition: failed course registration

Primary actors: student Secondary actors: system

**Trigger:** student selects a course to register

Main flow: - student logins

- student selects a course by faculty

- successful registration

Alternate flow: - student logins

- student selects a course by faculty

- course no longer found

- failed registration

# 9. Download Files (file can be assignment, coding file, pdf, slides etc)

Goal: To Download File

**Precondition:** Student must have registered course

Successful end condition: File Downloaded Failed end condition: File not downloaded

Primary actors: Student Secondary actors: System

**Trigger:** Student selects the file to download

Main flow: - Student logins

- Student register the course

- Student Downloads the file

Alternate flow: - Student logins

- Student is not registered in course

- File is not Downloaded

# 10. Upload Course Content:

Goal: To upload content

**Precondition:** Admin logged in

Successful end condition: content uploaded Failed end condition: cannot upload content

Primary actors: Admin
Secondary actors: System

**Trigger:** Admin selects a course to upload content to

Main flow: - Admin logs in
- Views courses
- Selects course
- Upload content

**Alternate flow:** - Views courses

- Selects course

- Select Upload content

- Cannot upload admin not logged in

#### 11. Online Guide - Ask:

Goal: to ask questions

**Precondition:** student logged in

Successful end condition: question successfully submitted

Failed end condition: question not submitted

Primary actors: student Secondary actors: admin

**Trigger:** query/confusion about some concept arises

Main flow: - student logins

- student following course

- student has questions about some concept, assignment

- student fills the Online Guide form and submits

Alternate flow: - student logins

student following coursestudent has no questions

#### 12 Online Guide - Answer:

**Goal:** Admin staff answer questions **Precondition:** Admin logged in

Successful end condition: Answer submitted

Failed end condition: Answer could not be submitted

Primary actors: Admin Secondary actors: System

**Trigger:** - Admin answers questions posed by student

Main flow: - Admin logs in

- Views the questions posed by student

- answers questions

**Alternate flow:** - Views the questions posed by student

- answers questions(not logged in)

- cannot answer q

#### 13 View FAQs:

**Goal:** Student can view Frequently Asked Questions

**Precondition:** Student logged in

Successful end condition: If stud. needs FAQ's' answers and has viewed and satisfied

Failed end condition: If stud. does not need FAQ's answers or was not satisfied

Primary actors: admin/student Secondary actors: System

**Trigger:** Student's general queries leading to this section

Main flow: - Student logs in

Needs some answersVisits FAQ sectionFounds answers

Alternate flow: - Student logs in

Needs some answersVisits FAQ section

- Couldn't find relevant queries

# 14. Update settings/profile:

**Goal:** student updates their profile **Precondition:** student logged in

**Successful end condition:** profile/settings updates **Failed end condition:** profile/settings failed to update

Primary actors: student Secondary actors: system

Trigger: student uploads their profile picture

Main flow: - student logins

- student goes to settings

- student uploads their profile picture

- profile updated successfully

Alternate flow: - student logins

- student goes to settings

- student uploads their profile picture

- profile picture failed to upload because of connectivity issues

### 15. User Logout:

Goal: log out off the system

**Precondition:** user successfully logged in **Successful end condition:** user logged out

Failed end condition: cannot logout

Primary actors: user

Secondary actors: system

**Trigger:** user attempts to logout **Main flow:** - user logs in

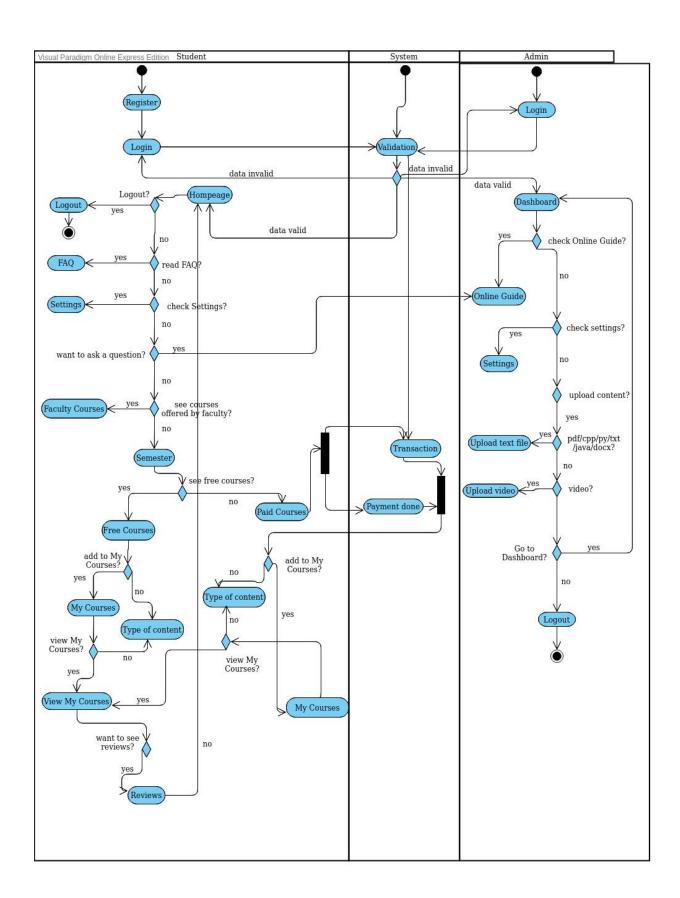
views contentattempt log out

Alternate flow: - view content

- attempt logout

- cannot log out; not logged in

# **Activity Diagram:**



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