**SOFTWARE ENGINEERING LAB**

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**Session 2022 – 2026**

**Submitted by:**

Raveeha Mohsin 2022-CS-149

**Supervised by:**

Mr. Atif

Ms. Maryam

Department of Computer Science

**University of Engineering and Technology**

**Lahore Pakistan**

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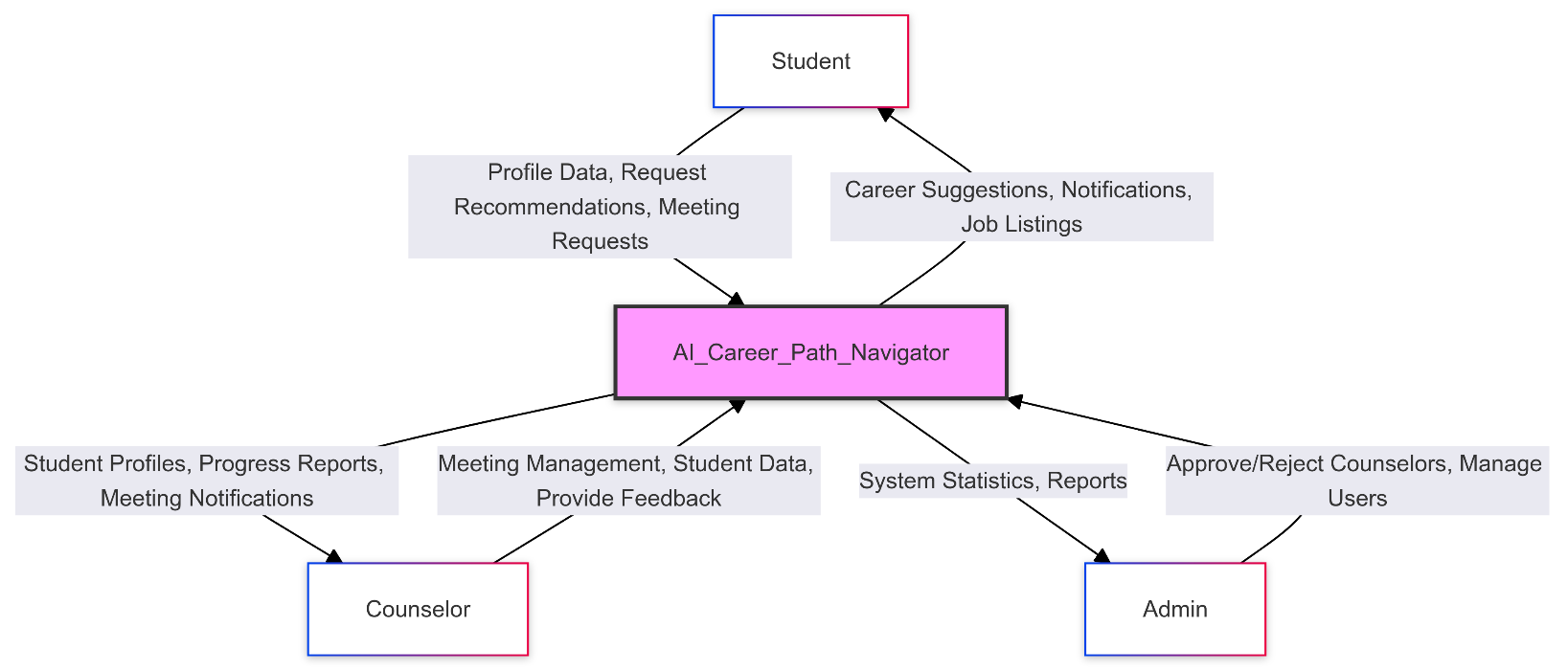
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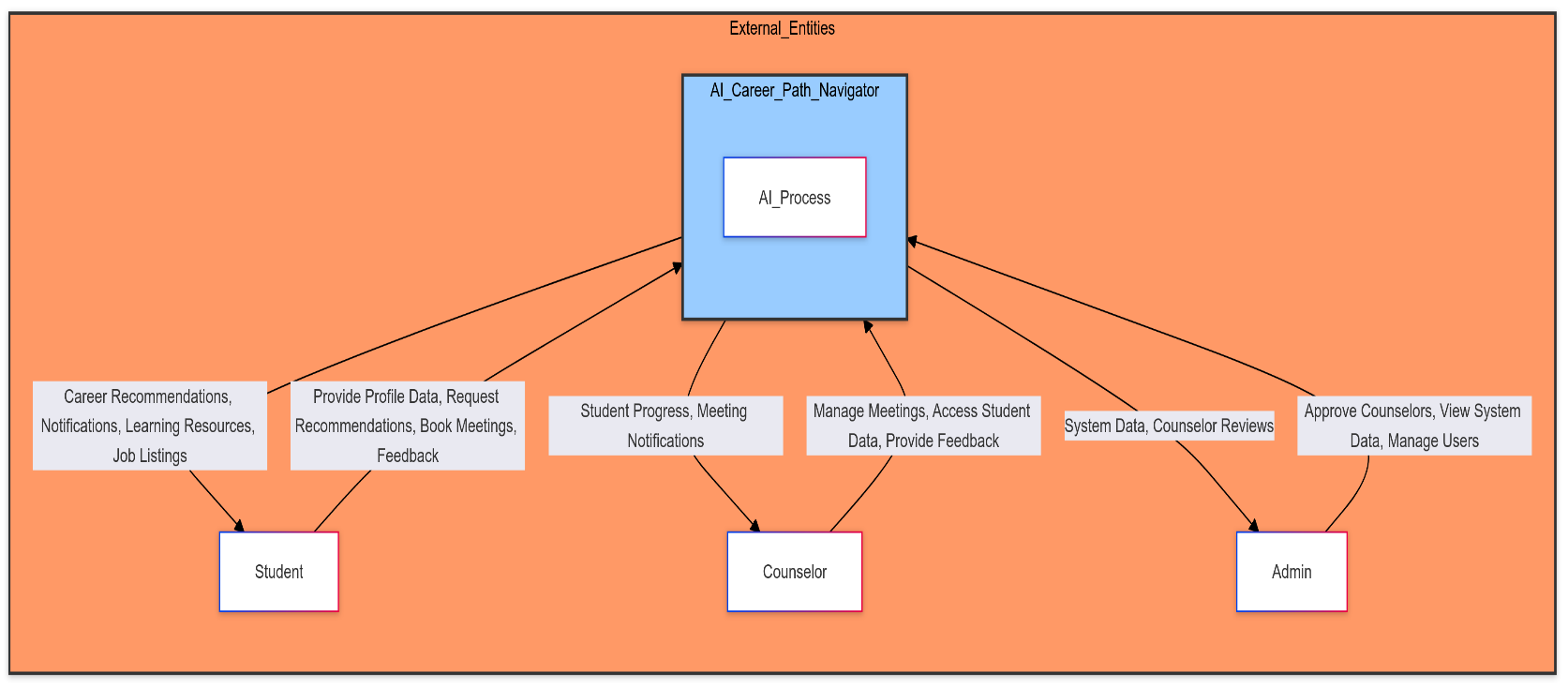
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# Data Flow Diagrams

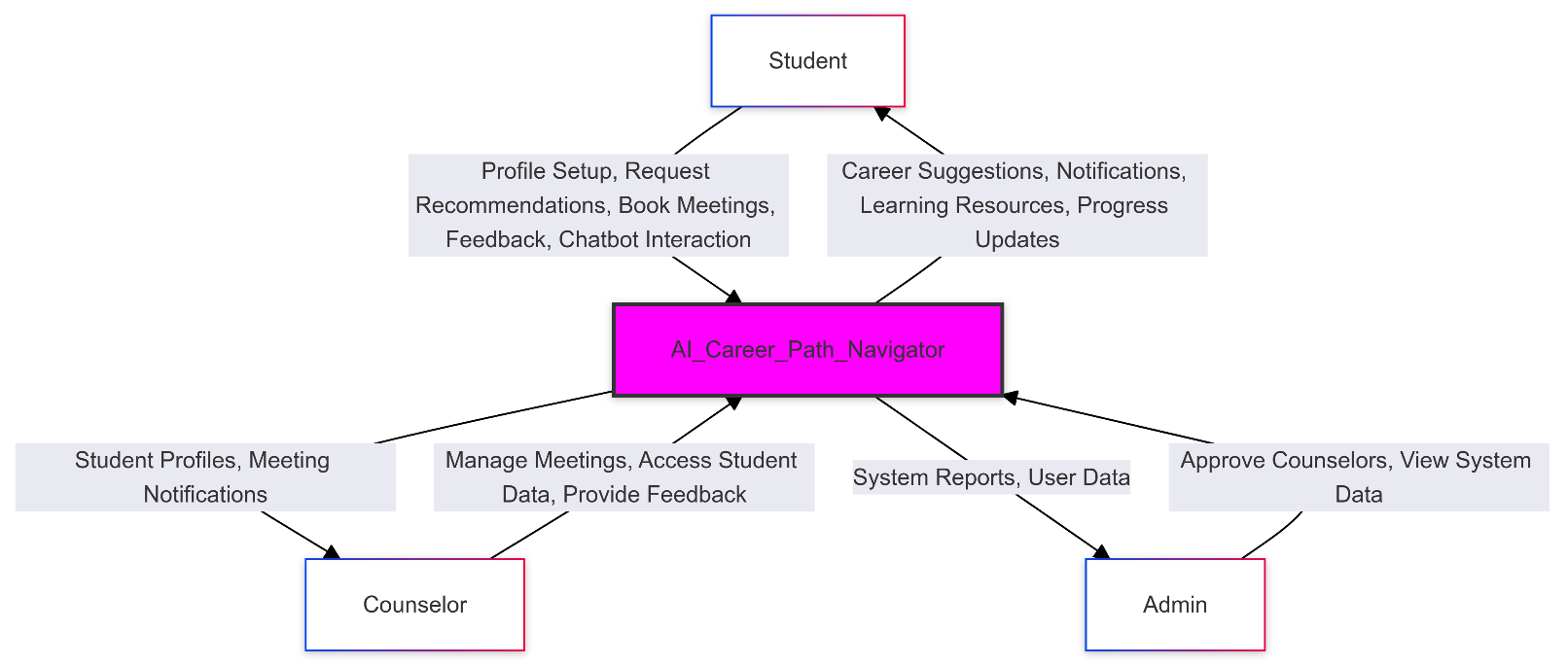
## ****Basic DFD Level 0**** for AI Career Path Navigator:



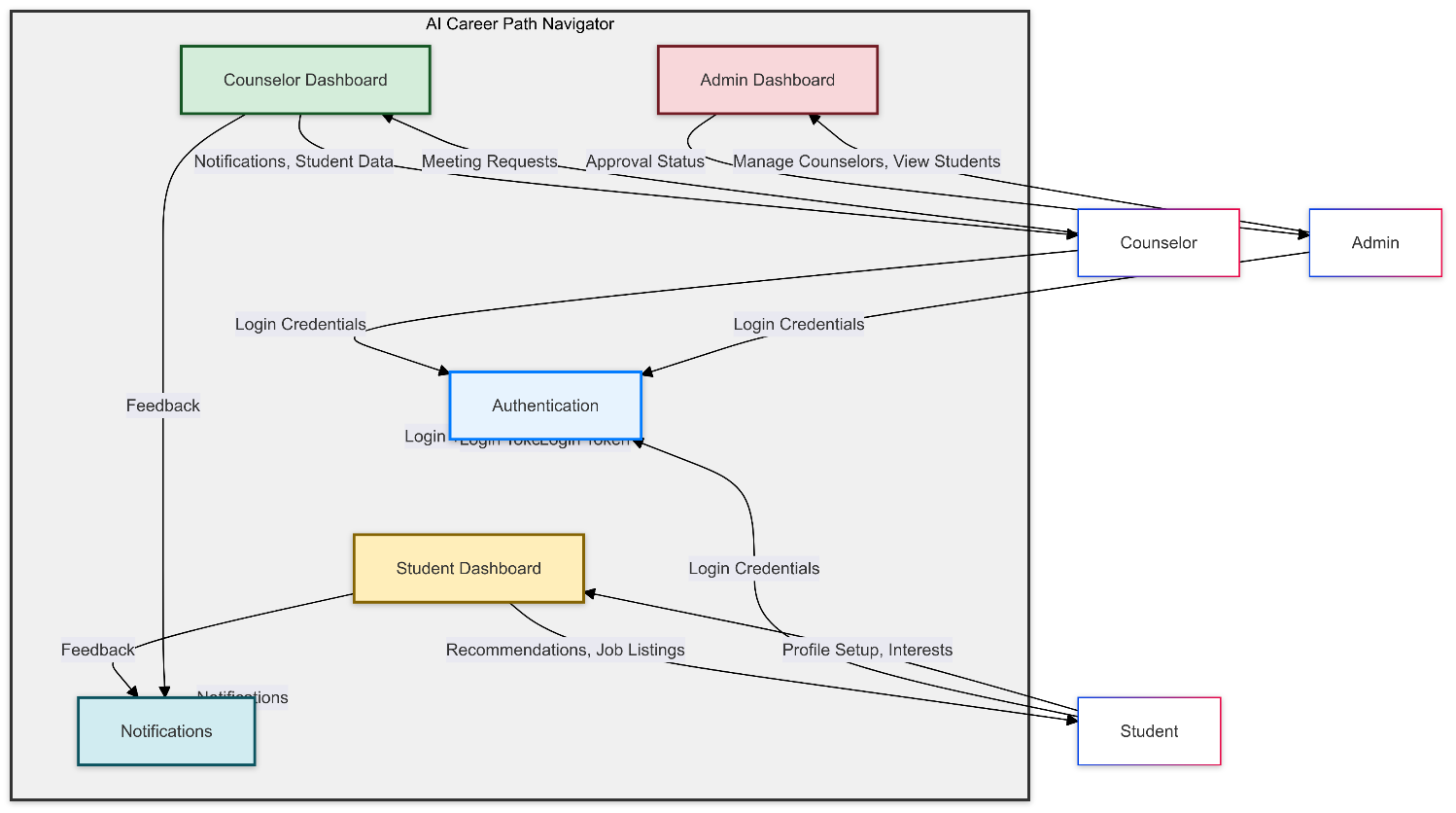
## ****Extended DFD Level 0**** with Detailed Data Flows:



## ****DFD Level 0 with Additional Features Like Chatbot & Notifications****:

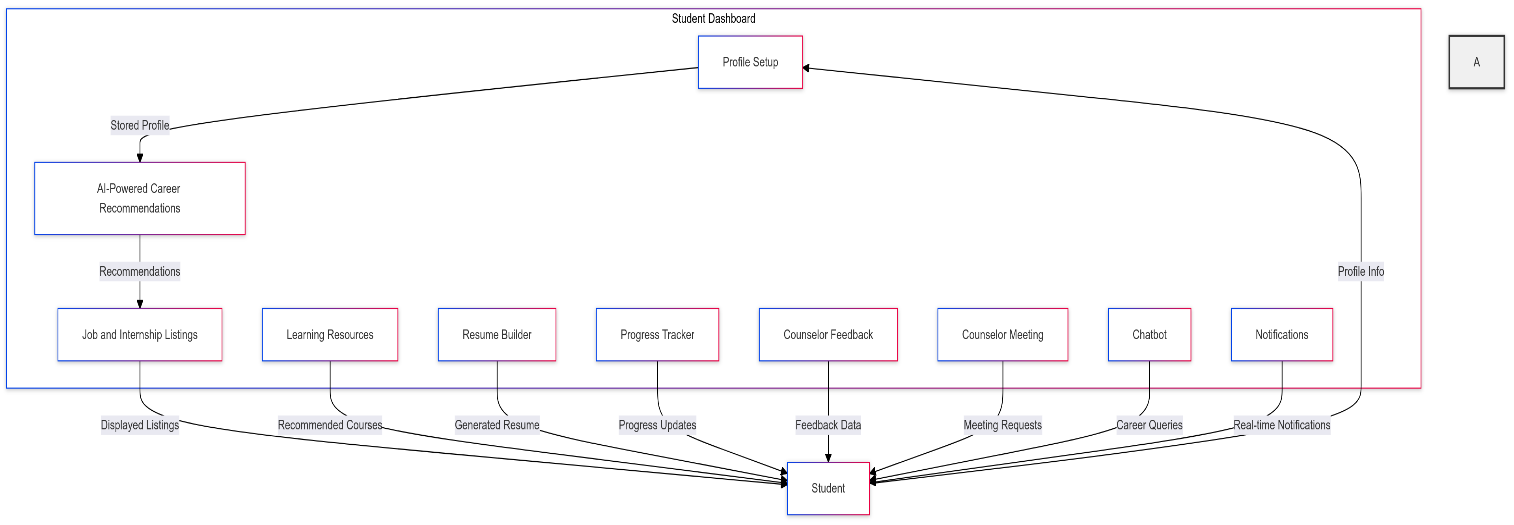


# DFD Level 1 for AI Career Path Navigator

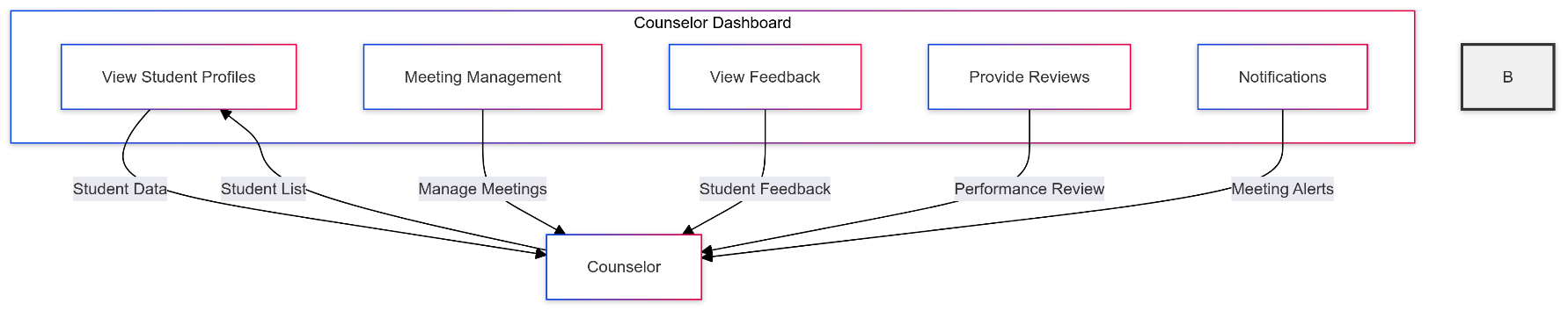


# DFD Level 2 for AI Career Path Navigator

## Student DFD Level 2

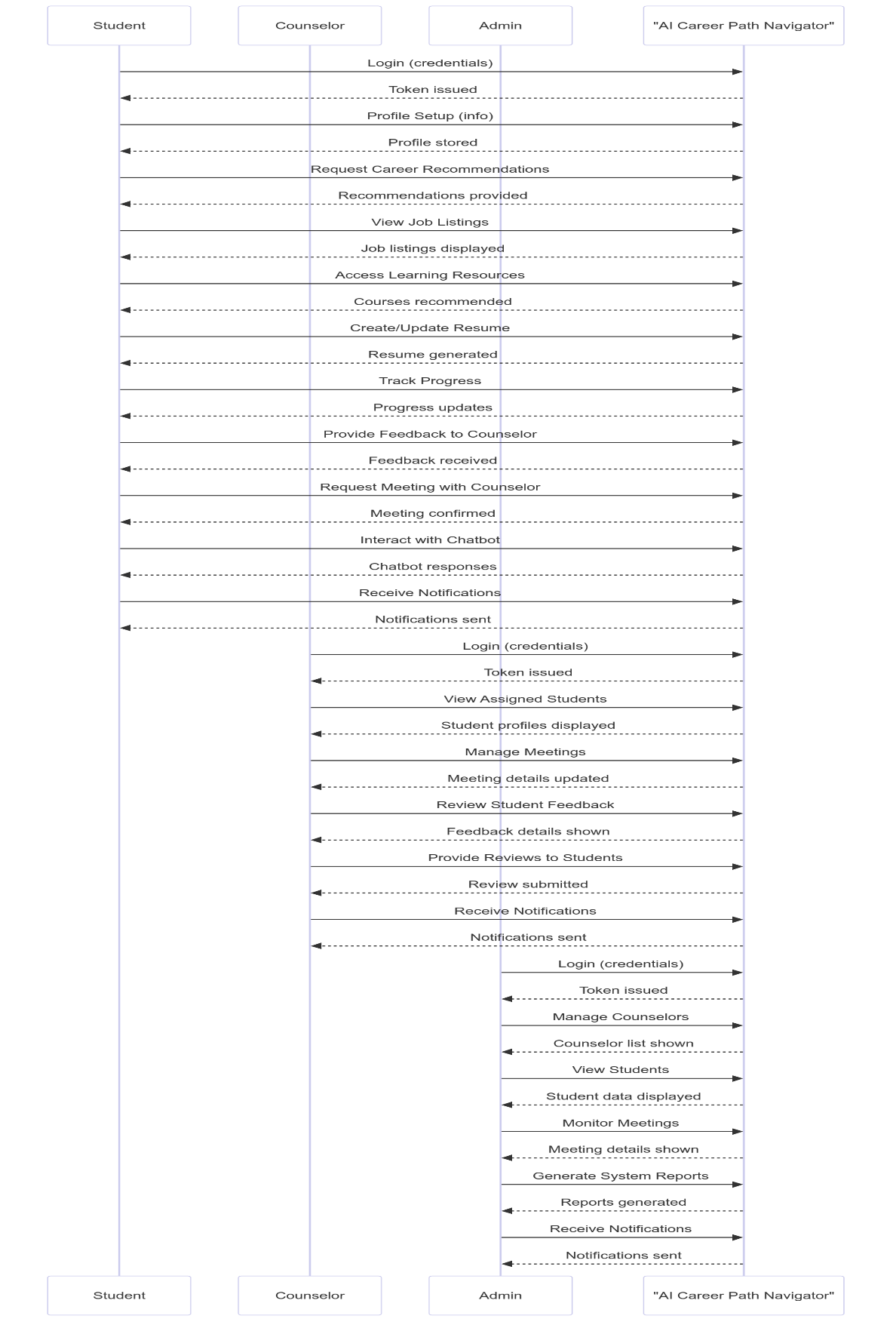


## Counselor DFD Level 2

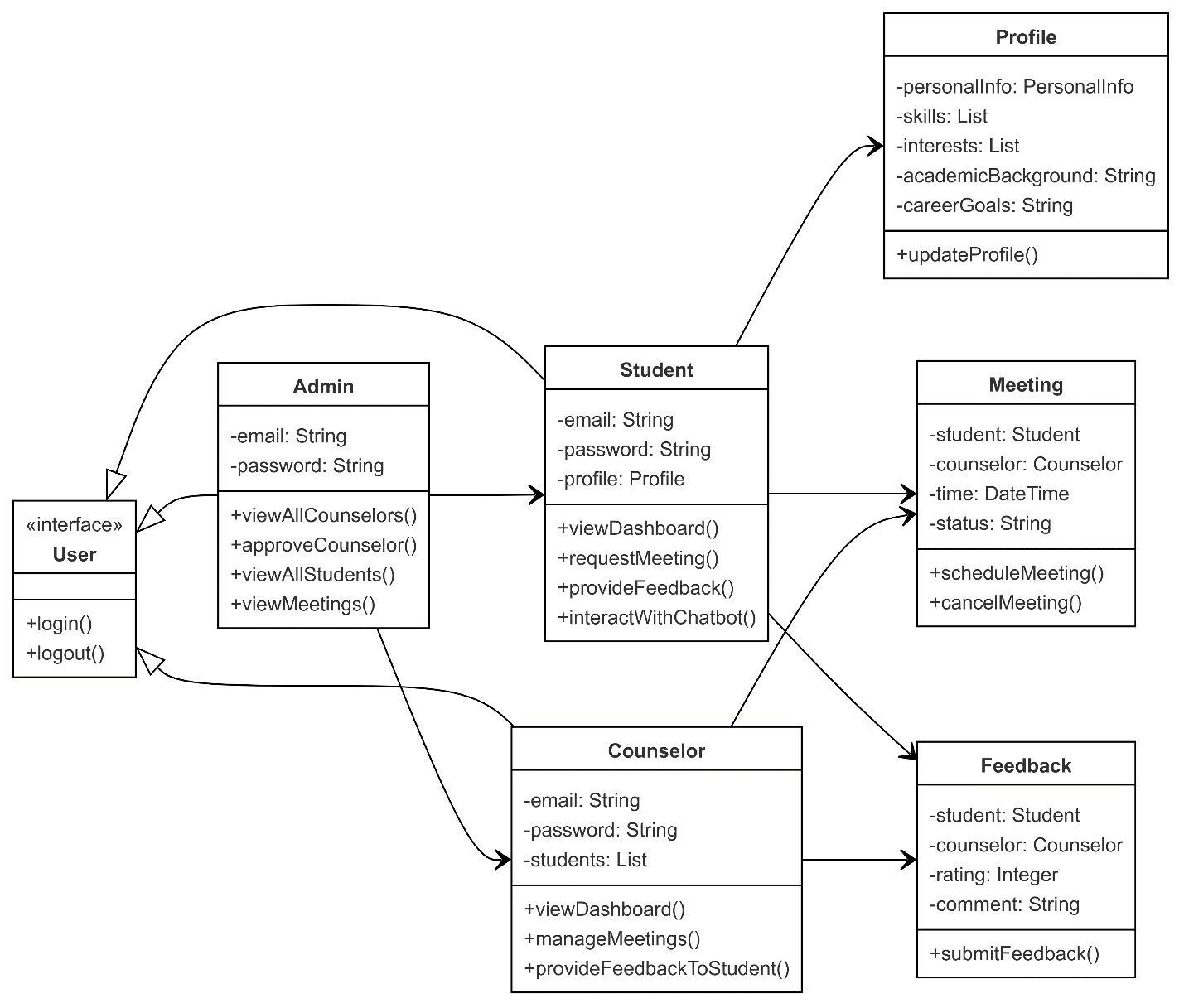


## Admin DFD Level 2

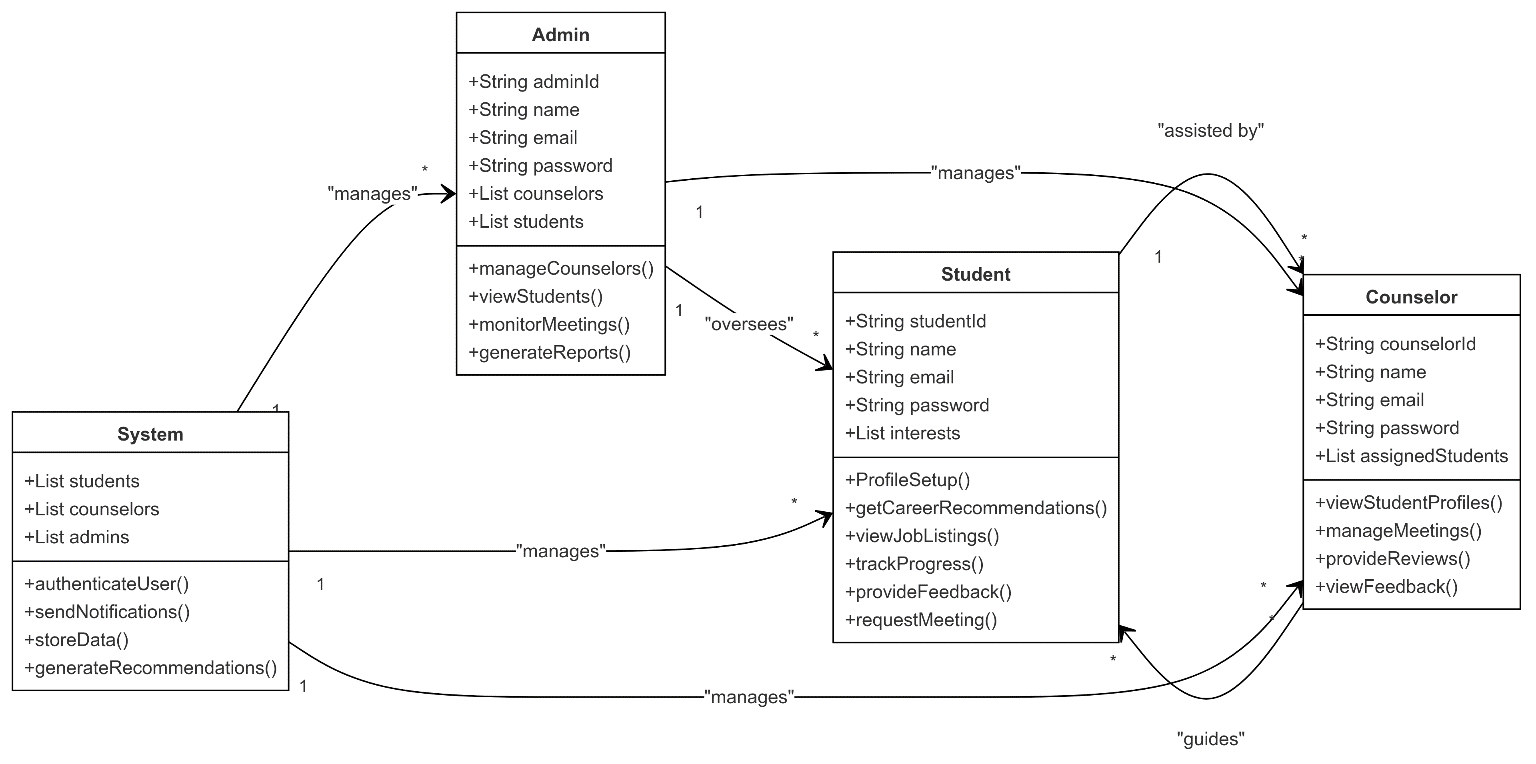
# Sequence Diagram for AI Career Path Navigator



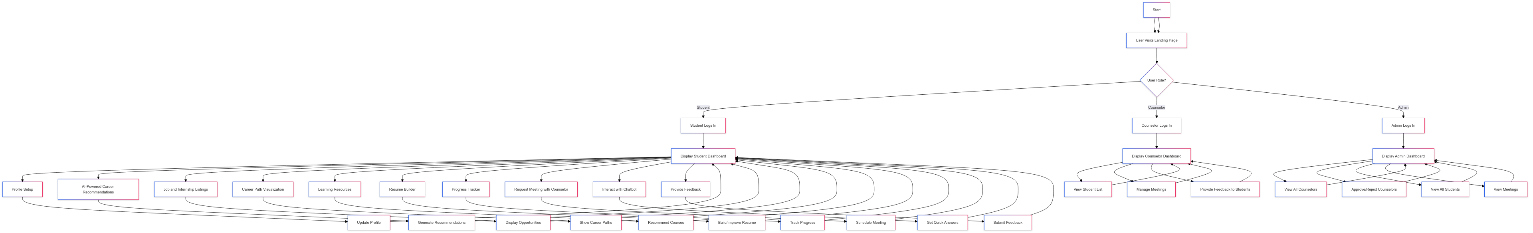
# UML Diagram for AI Career Path Navigator



# Class Diagram for AI Career Path Navigator



# Activity Diagram for AI Career Path Navigator



# Decision Tables

## Decision Table 1: User Login

|  |  |  |  |
| --- | --- | --- | --- |
| Condition | Valid Credentials | Account Status | Action |
| User Inputs Credentials | Yes | Active | Allow access to dashboard |
| User Inputs Credentials | Yes | Inactive | Display account inactive message |
| User Inputs Credentials | No | Any | Display invalid credentials message |

## Decision Table 2: Career Recommendation Generation

|  |  |  |  |
| --- | --- | --- | --- |
| Condition | Profile Complete | User Preferences | Action |
| Profile Complete | Yes | Matched | Generate personalized recommendations |
| Profile Complete | Yes | Not Matched | Suggest updating preferences |
| Profile Complete | No | Any | Prompt to complete profile |

## Decision Table 3: Meeting Scheduling

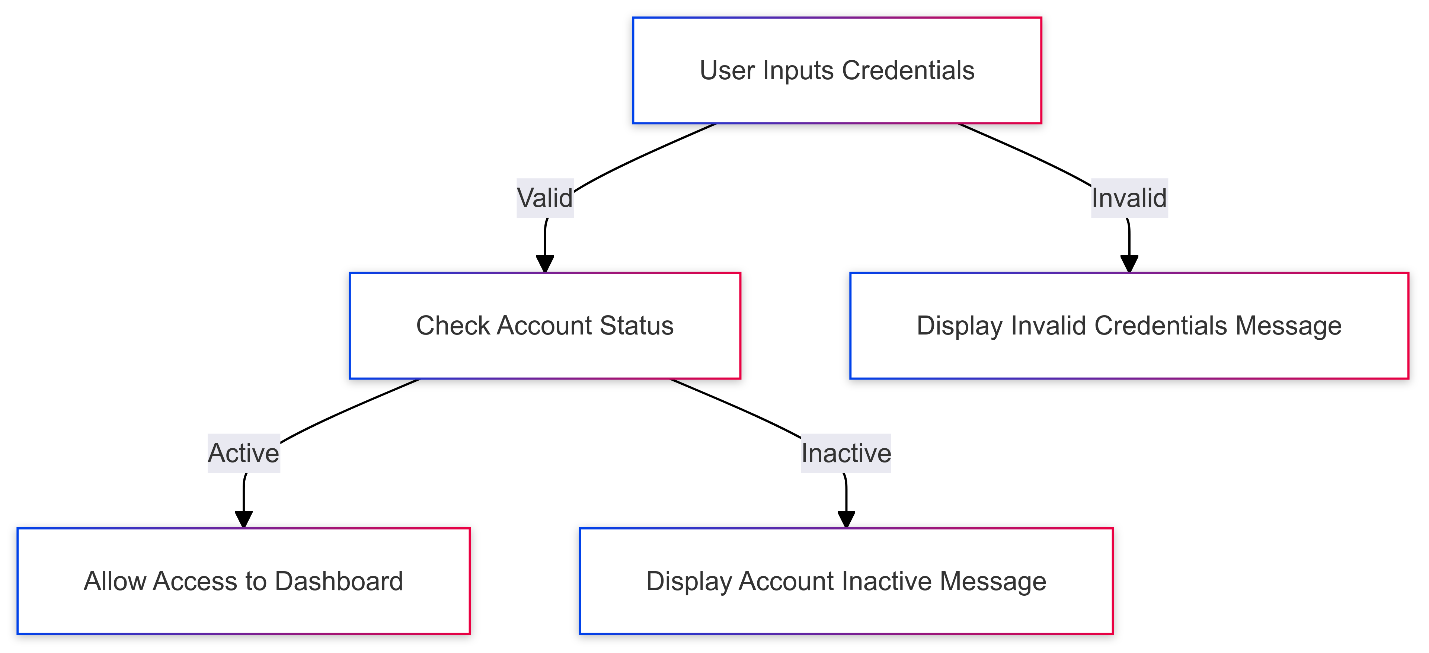
|  |  |  |  |
| --- | --- | --- | --- |
| Condition | Payment Made | Meeting Time Available | Action |
| Payment Made | Yes | Yes | Confirm meeting scheduled |
| Payment Made | Yes | No | Notify user of time unavailability |
| Payment Not Made | Any | Any | Notify user to complete payment |

# Decision Tree

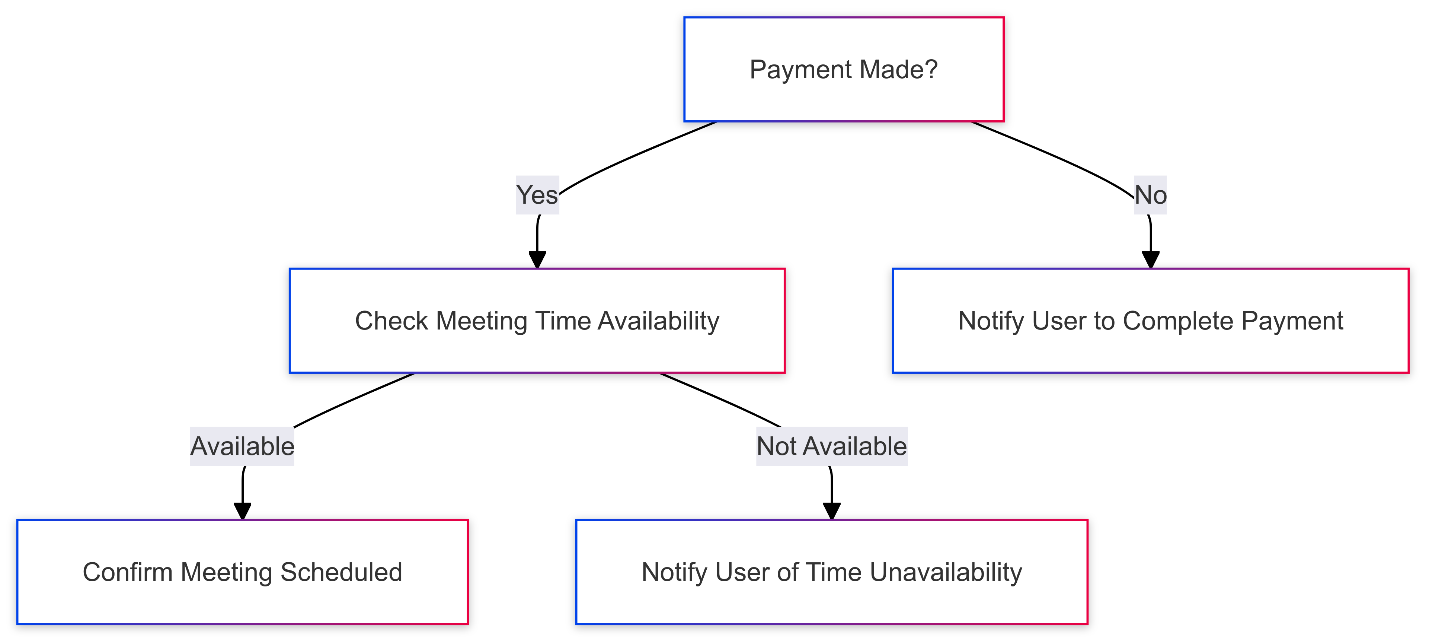
## Profile Completion

## 

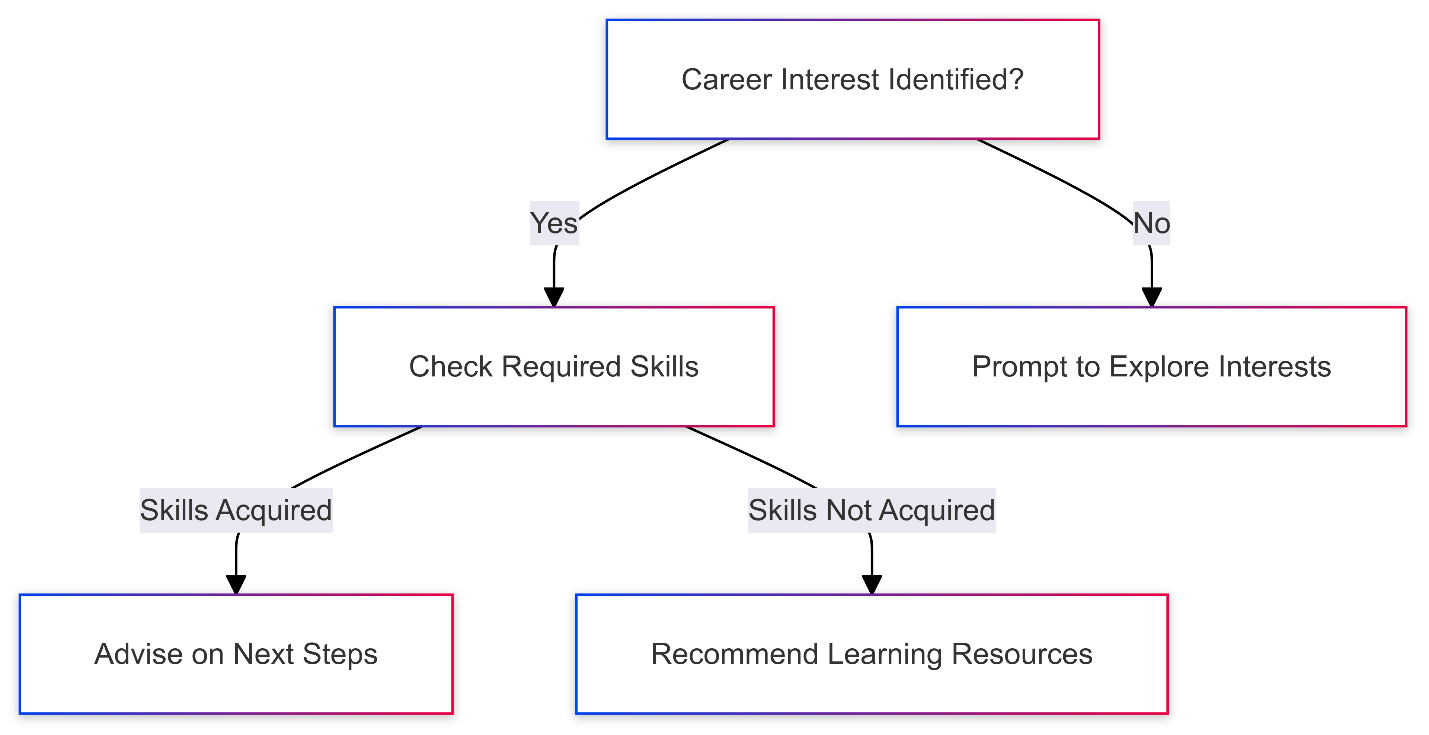
## User Login Decision Tree



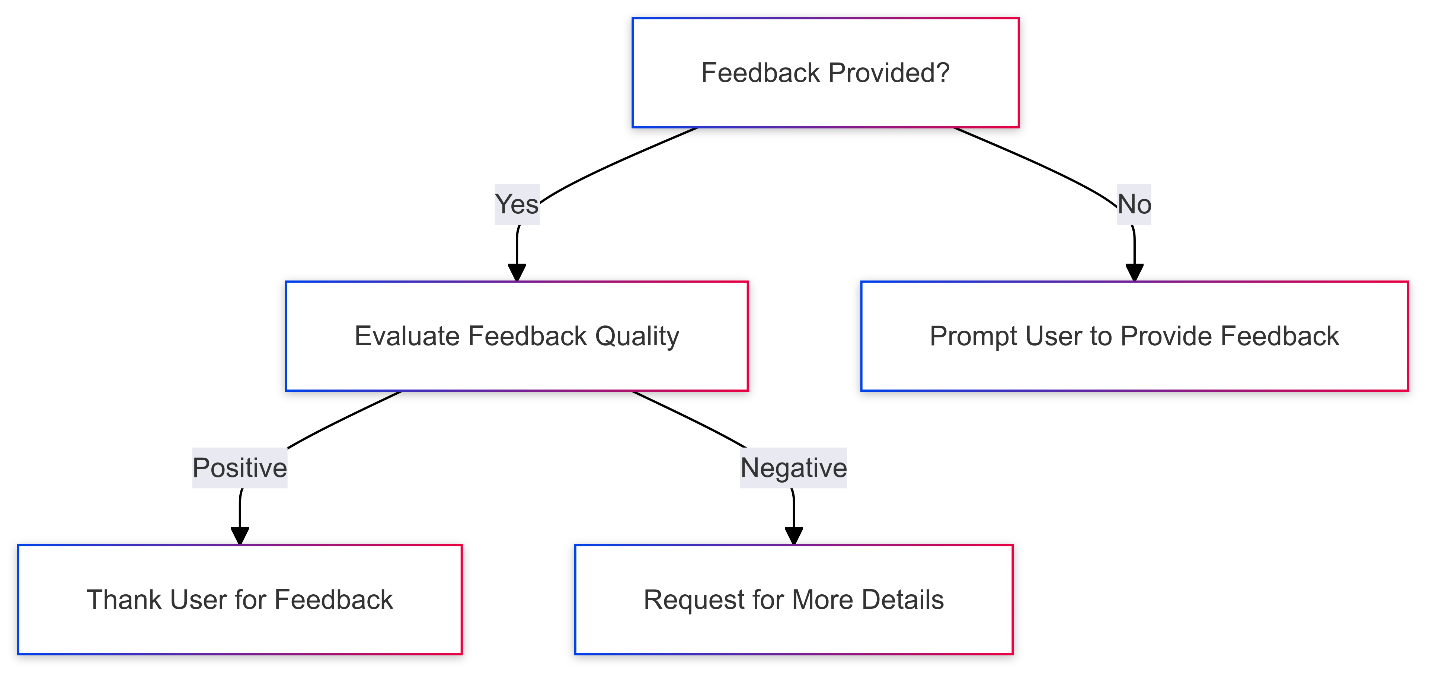
## ****Meeting Scheduling Decision Tree****



## Career Path Selection Decision Tree

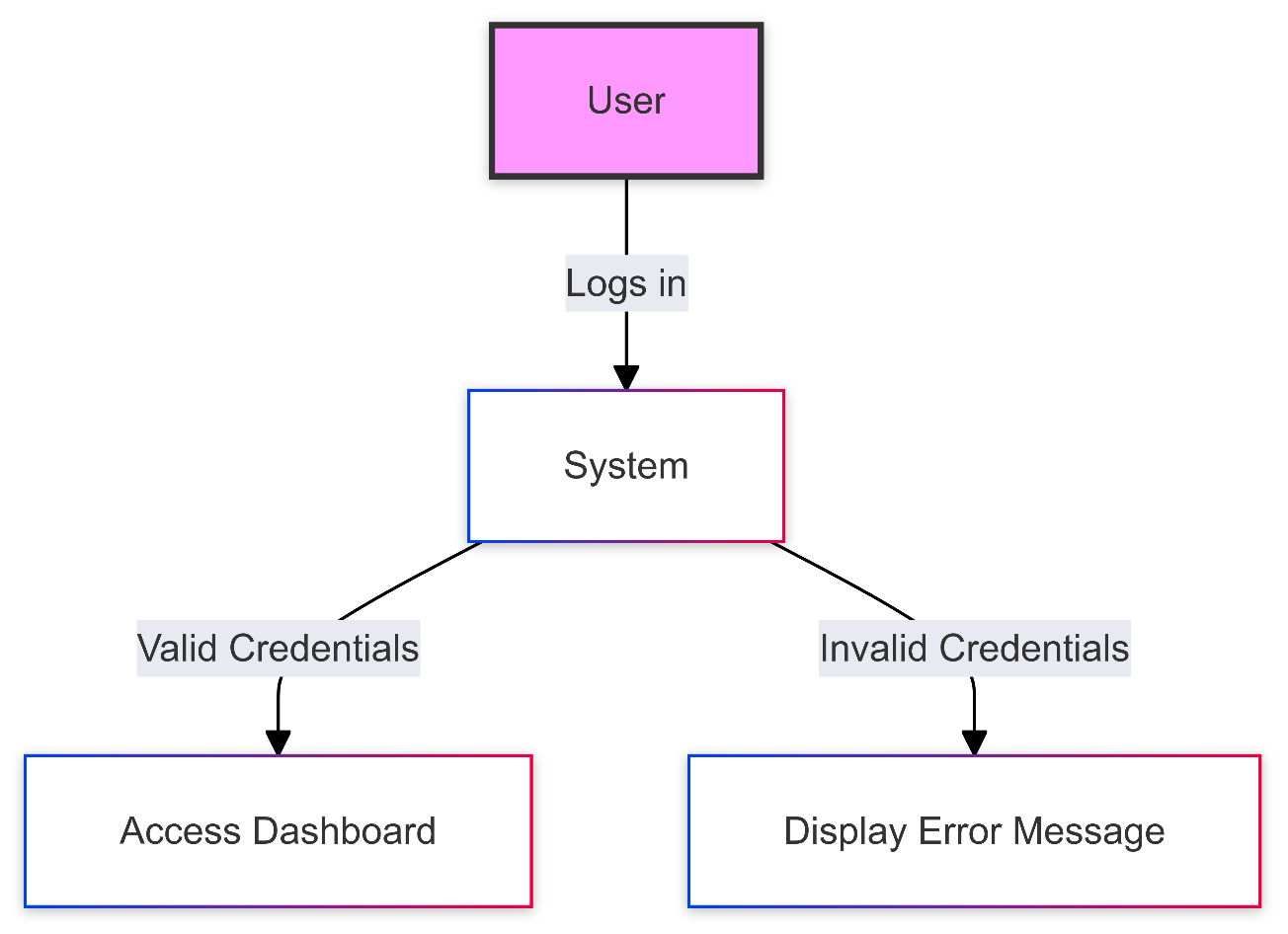


## Feedback Submission Decision Tree

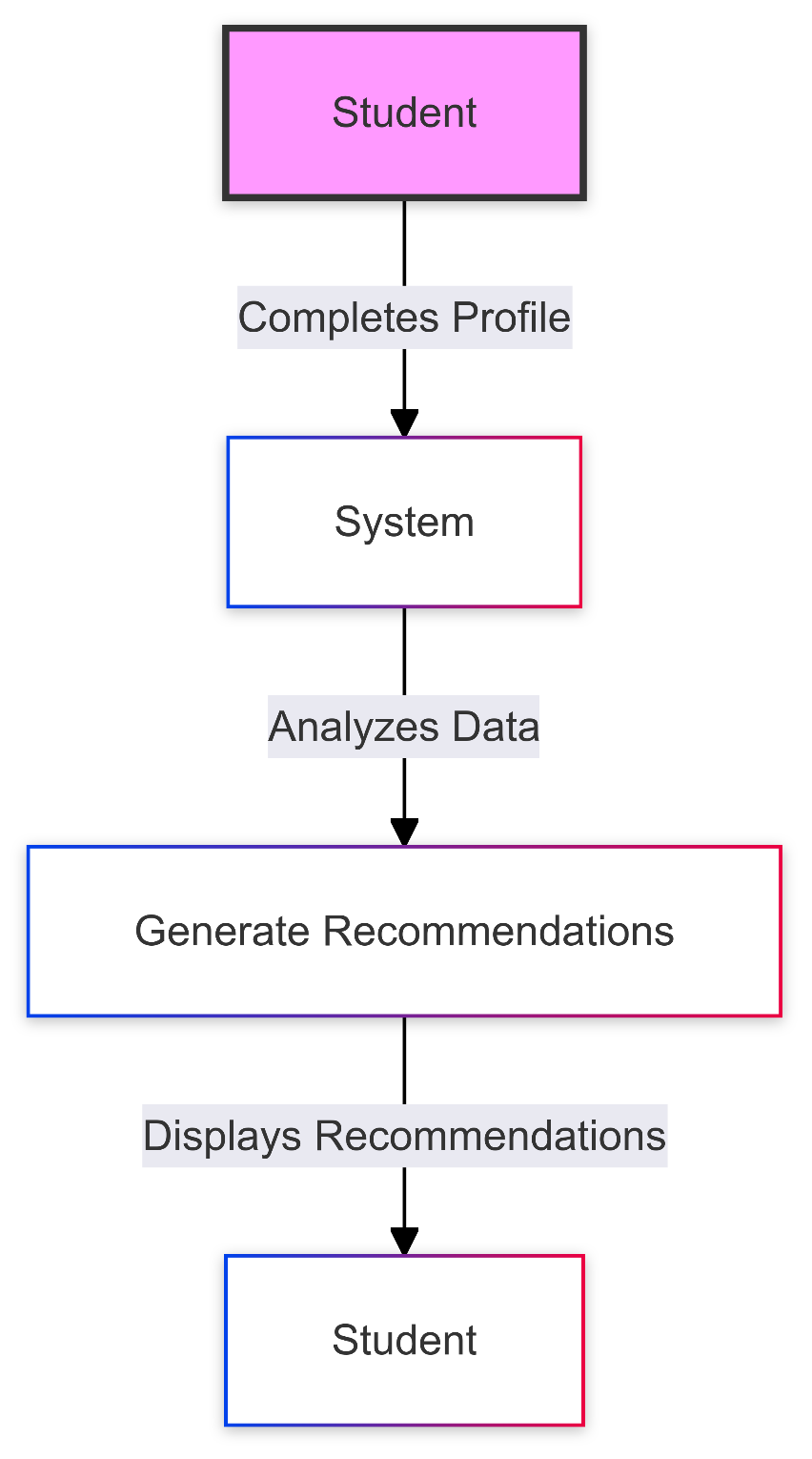


# Use Cases

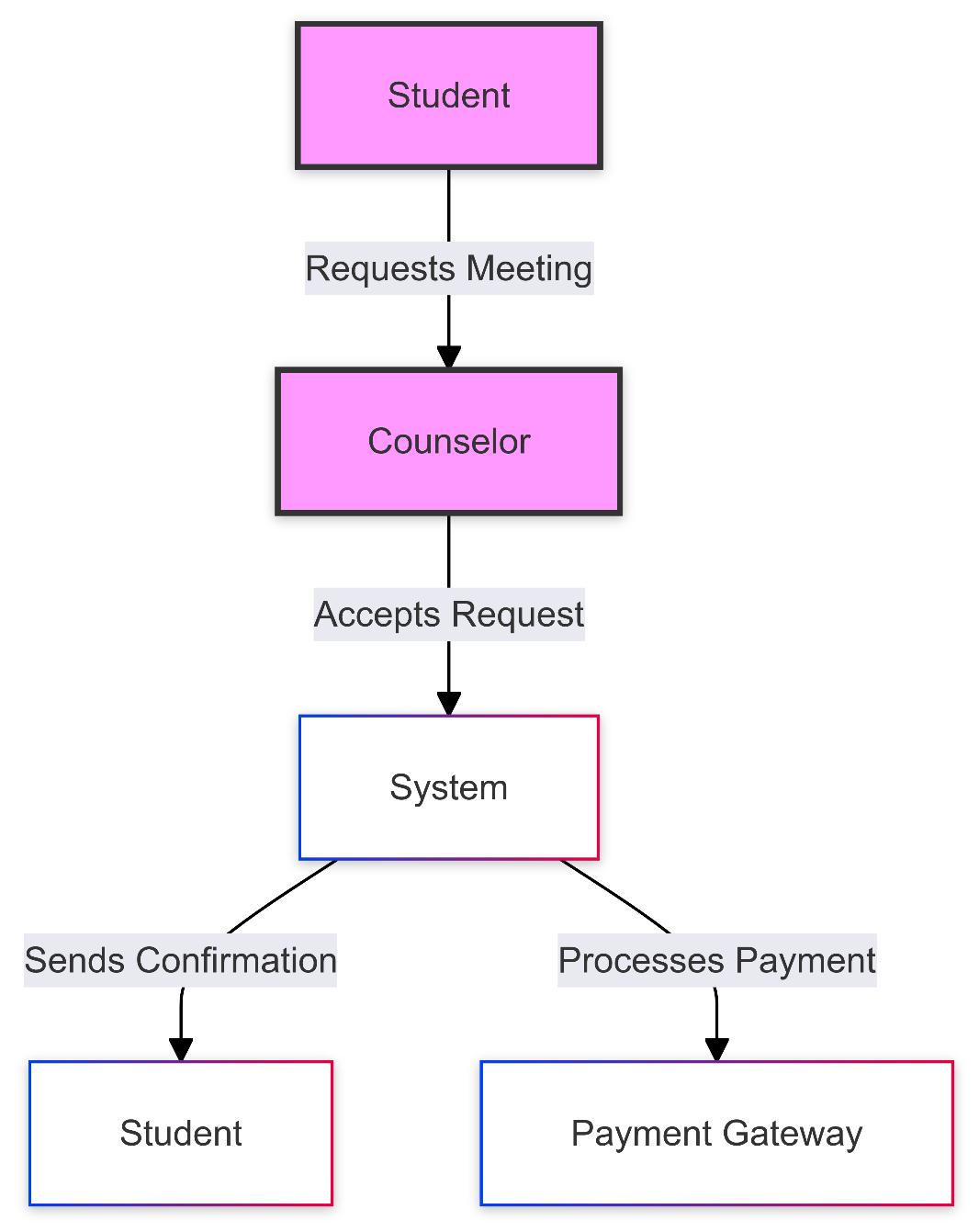
## User Login Use Case Diagram



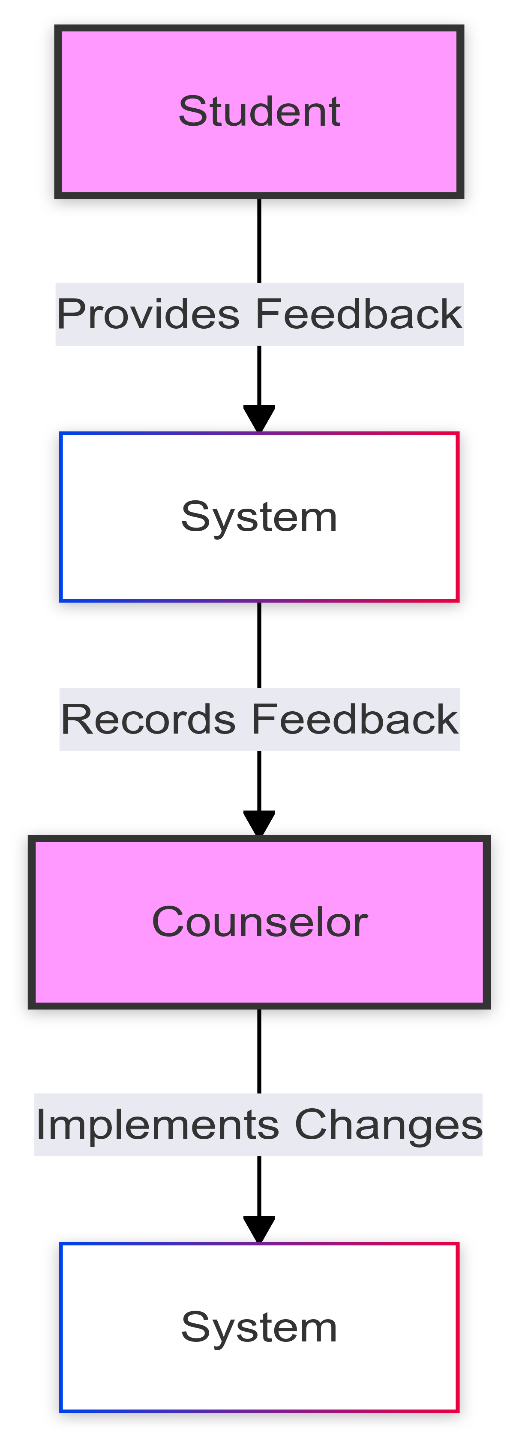
## Career Recommendation Generation Use Case Diagram



## Meeting Scheduling Use Case Diagram



## Feedback Submission Use Case Diagram



# https://cms.boardmix.com/images/articles/what-is-a-conceptual-architecture-diagram.pngConceptual Design

