

# College Management API Documentation

## Introduction

This document provides an overview of the API for the College Management System. The API enables user authentication, college data retrieval, and course details management.

## Base URL

<https://college-management-0j7n.onrender.com>

## Endpoints

### Authentication

- Login Endpoint:**
- **URL:** /api/auth/login
  - **Method:** POST
  - **Description:** Authenticate a user and return a JWT token.
- Signup Endpoint:**
- **URL:** /api/auth/signup
  - **Method:** POST
  - **Description:** Create a new user account.

### Colleges

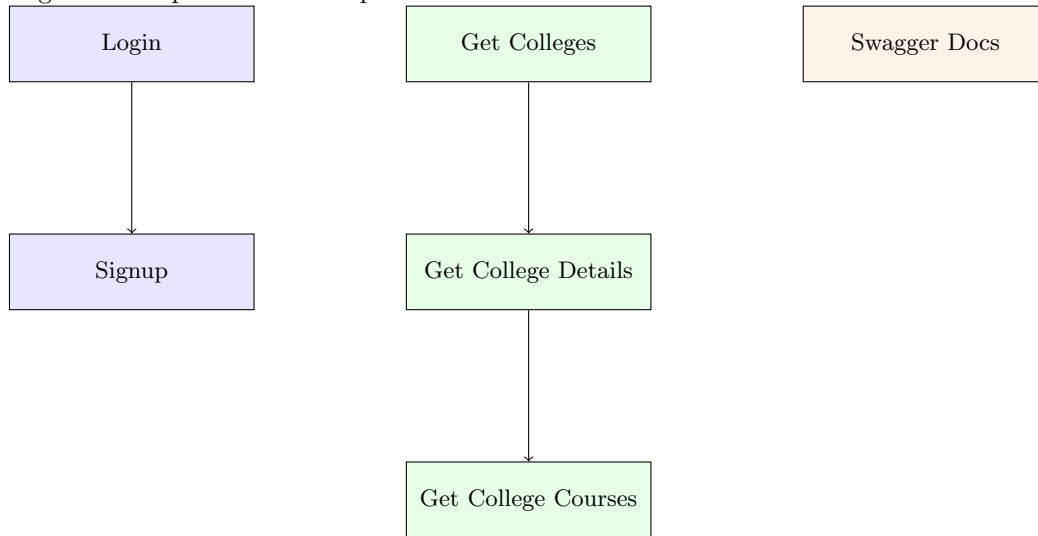
- Get Colleges Endpoint:**
- **URL:** /api/colleges
  - **Method:** GET
  - **Description:** Retrieve a list of colleges filtered by city and/or state.
- Get College Details Endpoint:**
- **URL:** /api/college\_data/id
  - **Method:** GET
  - **Description:** Retrieve placement data for a specific college.
- Get College Courses Endpoint:**
- **URL:** /api/college\_courses/id
  - **Method:** GET
  - **Description:** Retrieve a list of courses offered by a specific college.

### Swagger API Documentation

- **URL:** /api-docs
- **Method:** GET
- **Description:** View the Swagger API documentation for all endpoints.

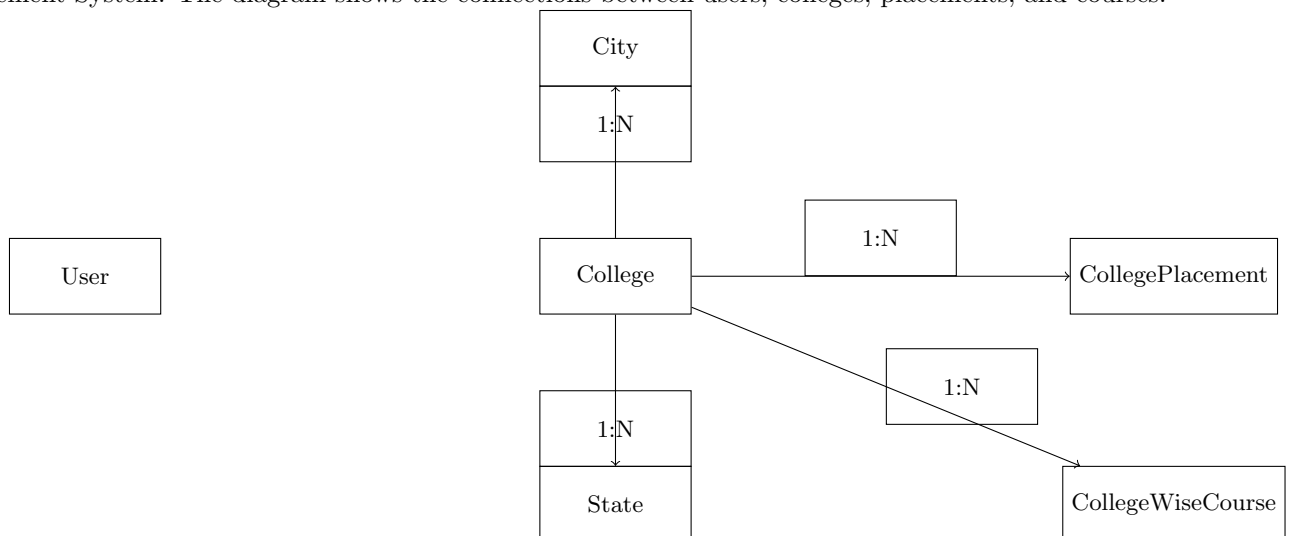
## Flowchart of API Endpoints

The following flowchart illustrates the various API endpoints. Each node in the flowchart is clickable, leading to the respective API endpoint URL.



## Entity-Relationship (ER) Diagram

The following ER diagram represents the relationships between the main entities in the College Management System. The diagram shows the connections between users, colleges, placements, and courses.



## Data Models

### User

Field	Type	Example
id	Integer	1
name	String	John Doe
email	String	john.doe@example.com
createdAt	DateTime	2023-12-31T12:00:00Z
updatedAt	DateTime	2023-12-31T12:00:00Z

## College

Field	Type	Example
id	Integer	1
name	String	ABC College
score	Integer	850
city	String	New York
state	String	NY

## College Placement

Field	Type	Example
id	Integer	1
collegeId	Integer	1
year	Integer	2023
highestPlacement	Float	120000.00
averagePlacement	Float	75000.00
medianPlacement	Float	60000.00
placementRate	Float	95.5

## Course

Field	Type	Example
id	Integer	101
collegeId	Integer	1
courseName	String	Computer Science
courseDuration	String	4 years
courseFee	Float	15000.00