CMU SCORE ANNOUNCEMENT

Backend

Backend

RESTFull API

CPE APIs that can be implemented include:

- Course /course/detail
- Section /course/section

SERVER: https://api-score.cpe.eng.cmu.ac.th/api/v1

CMU OAUTH that can be retrieved basic information

Backend

Database

- **Version:** 6.0.10
- **Cloud Provider** Azure
- **Religion:** Azure/Hong Kong
- **Storage** 512MB

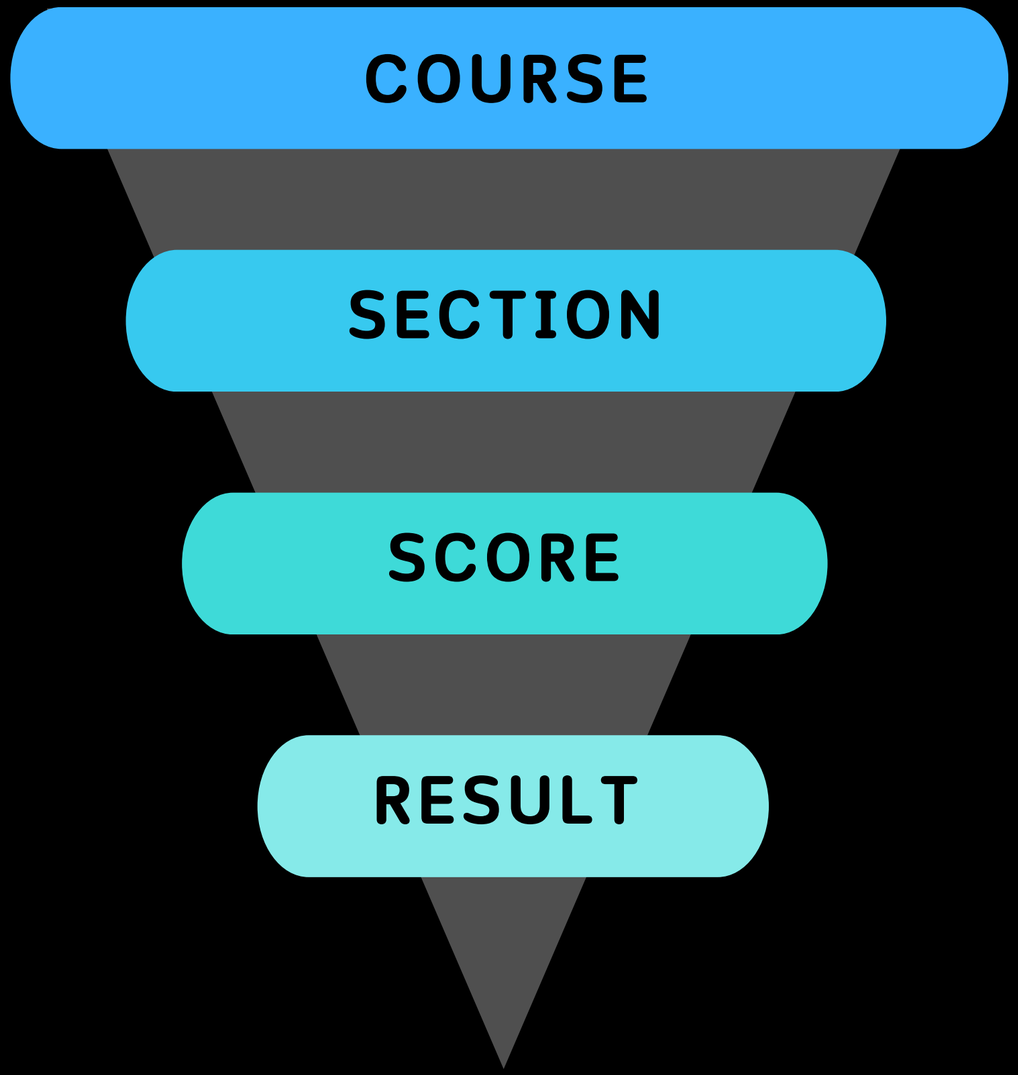
Backend

Collection

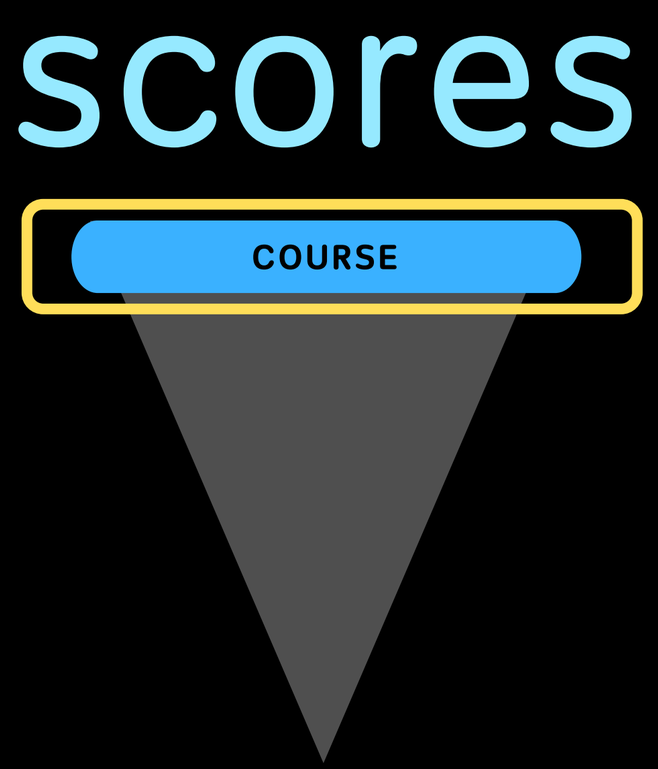
- scores
- students
- admin_users
- current [1]

1.Only admin is changeable.

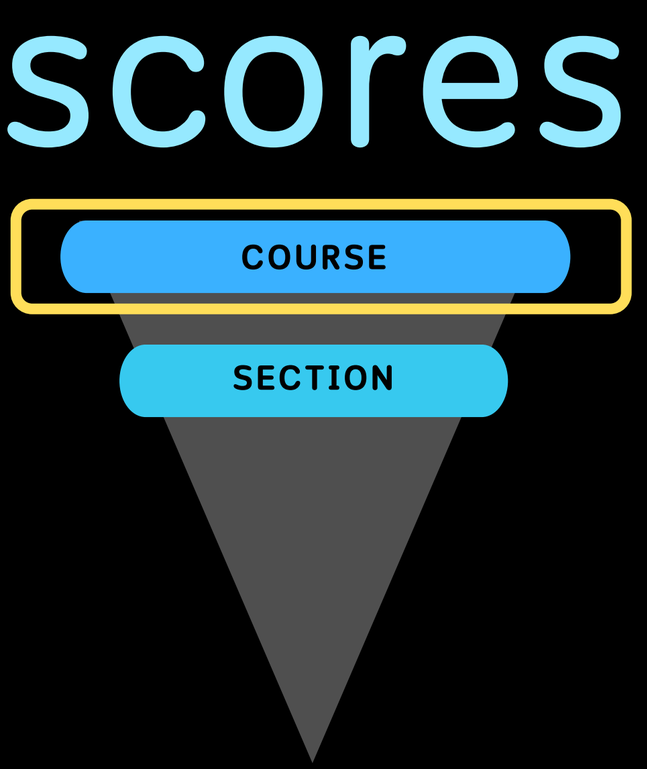
scores



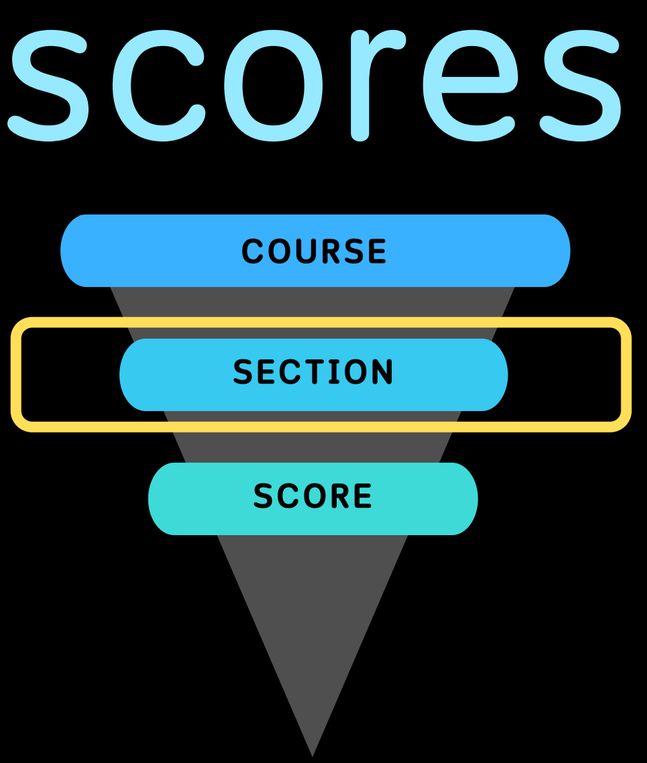
```
{
  courseNo: String,
  courseName: String,
  year: Number,
  semester: Number,
  sections: Array
}
```



```
sections: [
  {
    section: Number,
    instructor: String,
    coInstructors: [{ type: String }],
    scores: Array
  }
]
```

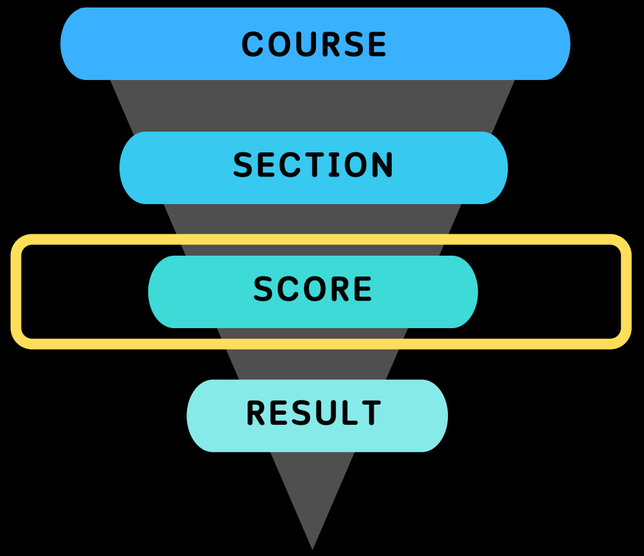


```
scores: [
  {
    scoreName: String,
    studentNumber: Number,
    fullScore: Number,
    isPublish: Boolean,
    results: Array
  }
]
```

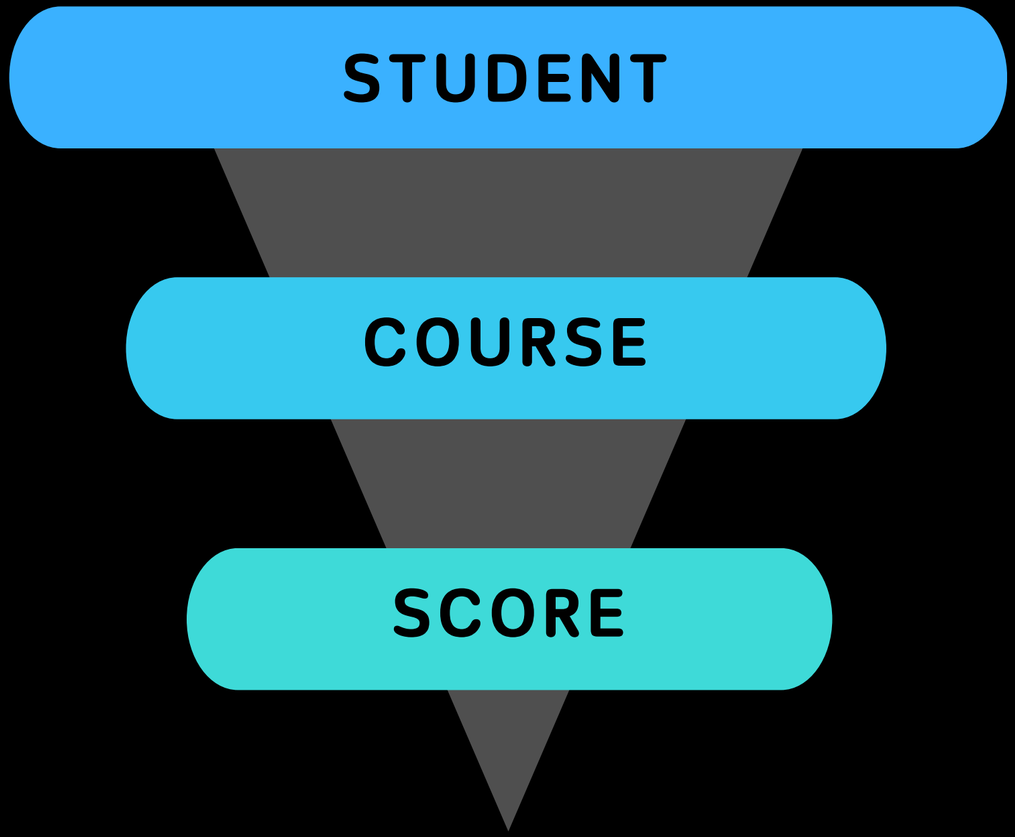


```
results: [
  {
    student_code: Number,
    firstName: String,
    lastName: String,
    point: Number,
  }
]
```

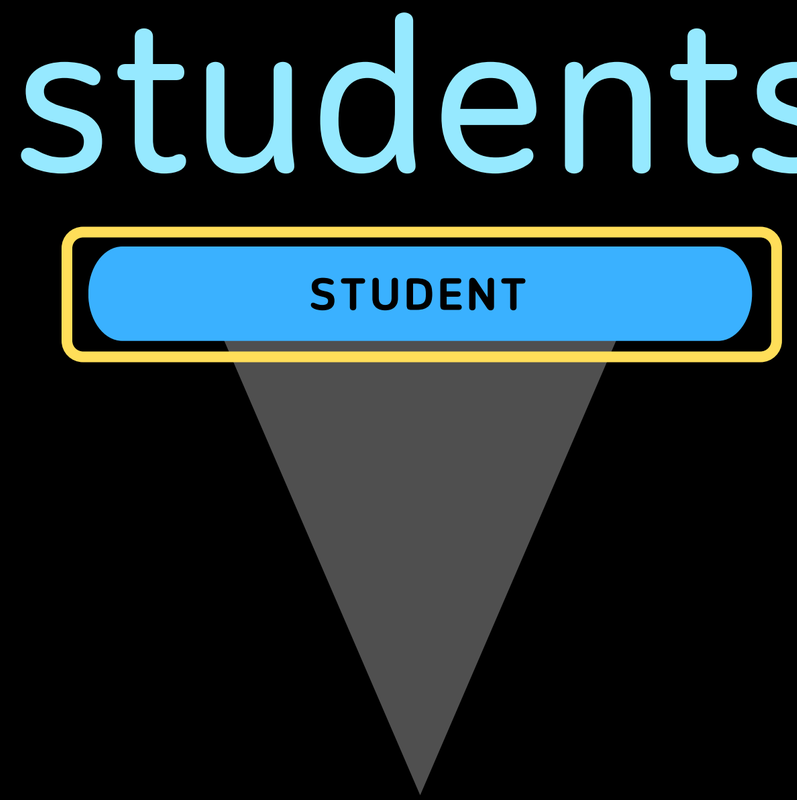
scores



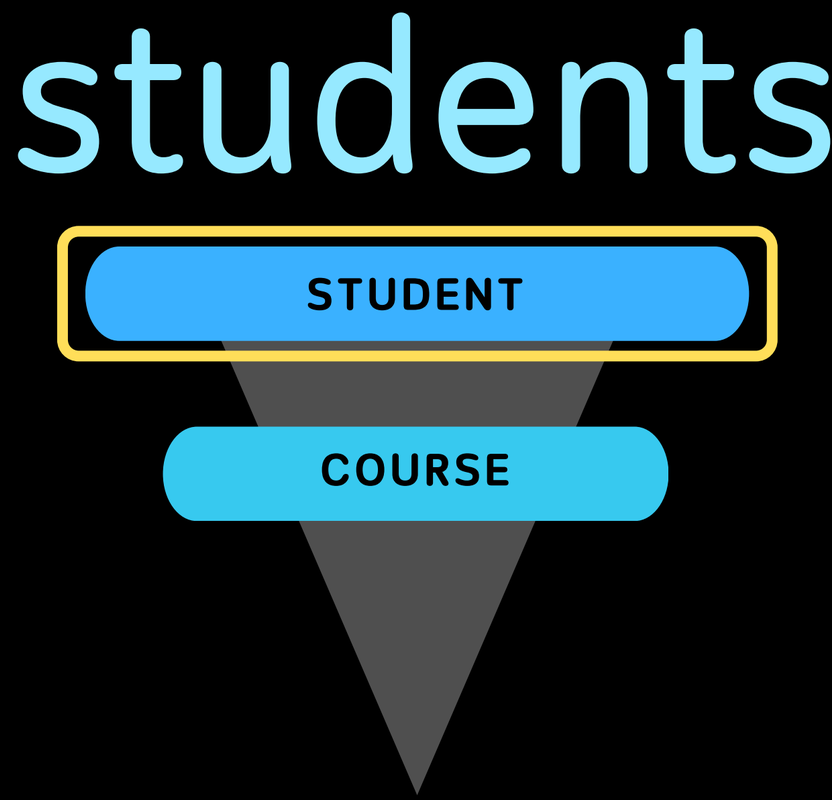
students



```
{
  studentID: Number,
  firstName: String,
  lastName: String,
  courseGrades: Array
}
```

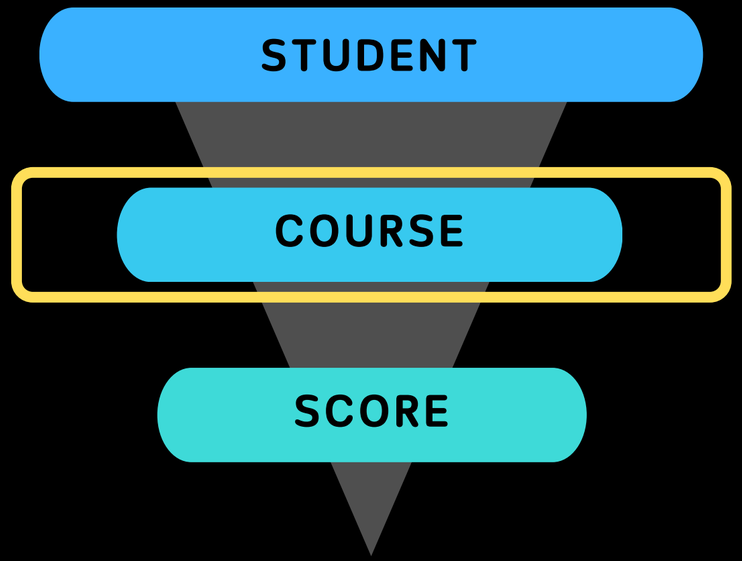


```
courseGrades: [
  {
    courseNo: String,
    courseName: String,
    section: Number,
    year: Number,
    semester: Number,
    scores: Array
  }
]
```

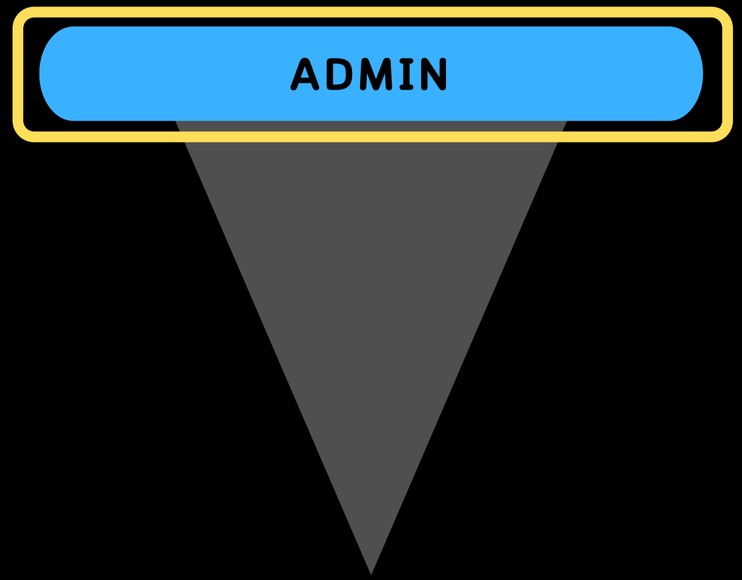


```
scores: [
  {
    scoreName: String,
    point: Number,
  }
]
```

students



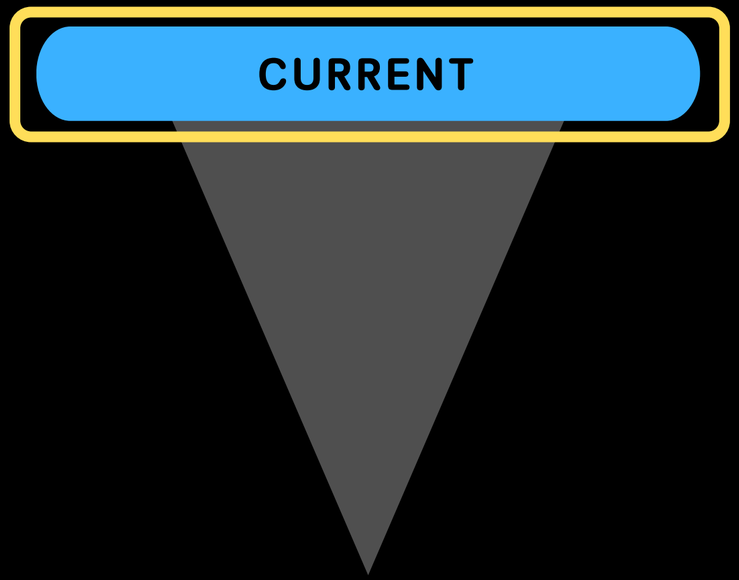
admin_users




```
{
  admin: String (unique)
}
```

current

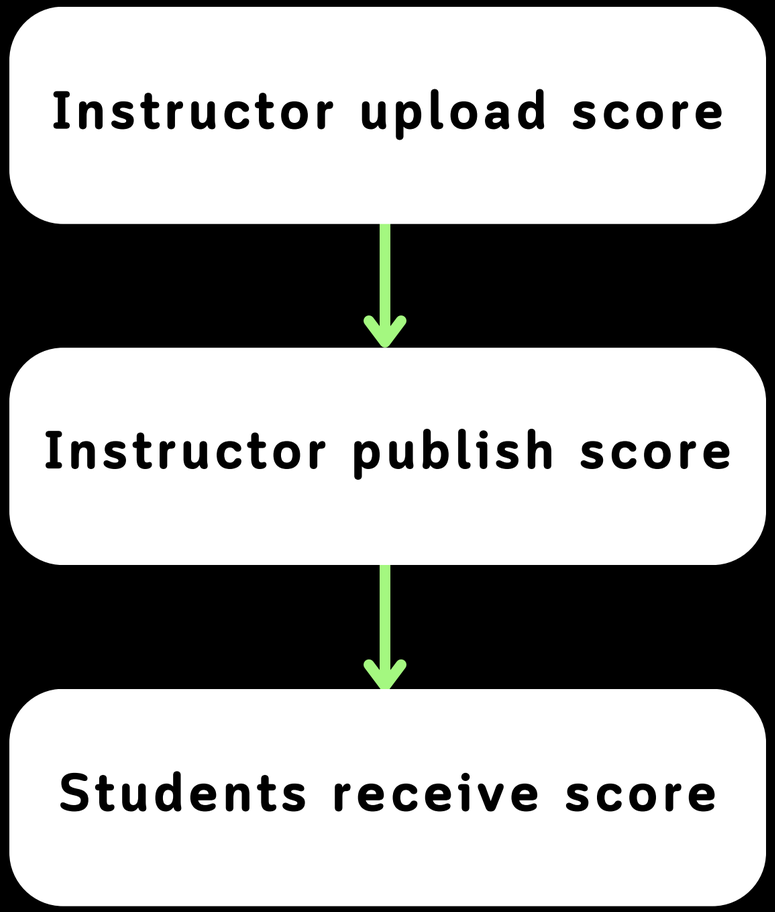
```
{
  semester: Number,
  year: Number,
  admin: String,
}
```



(only admin is changeable)

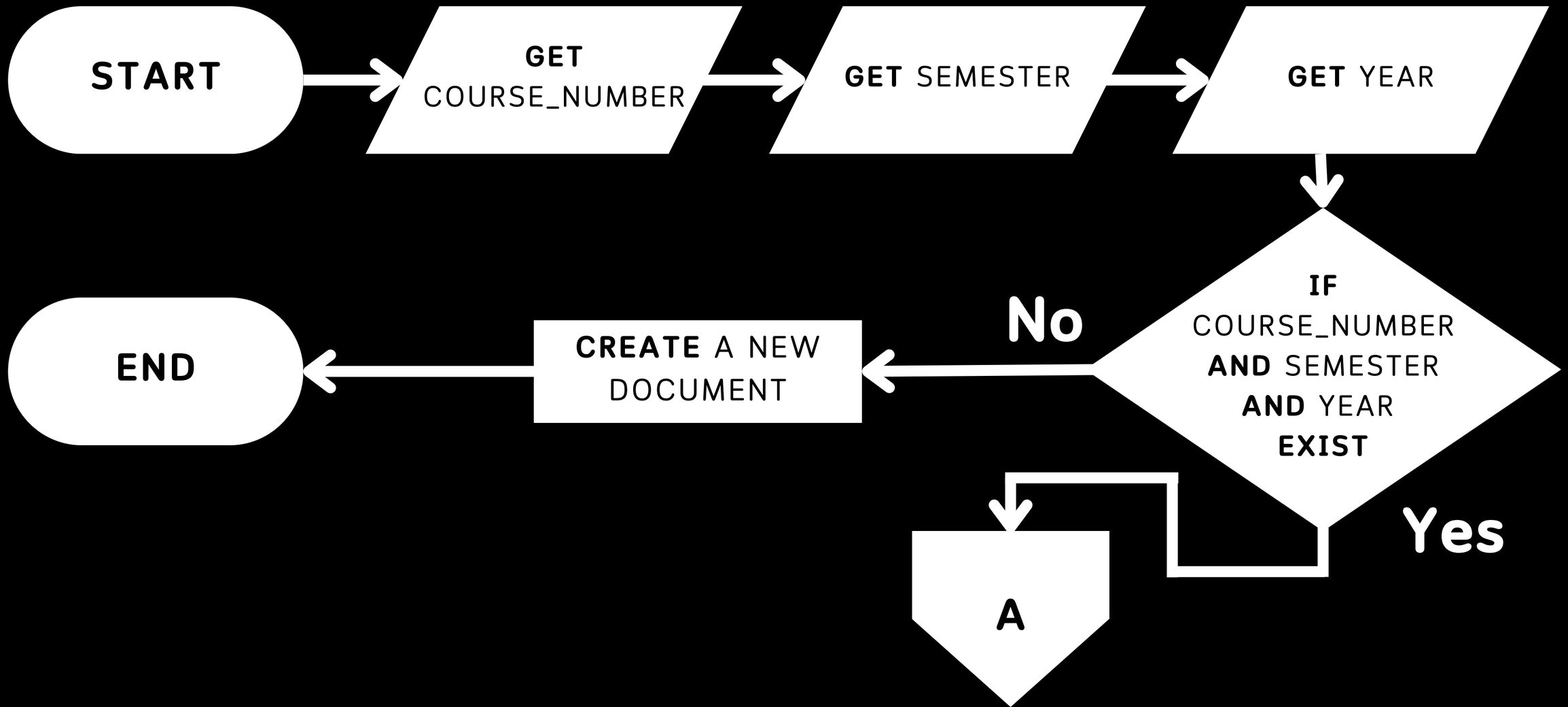
Backend

Project Structure Overview



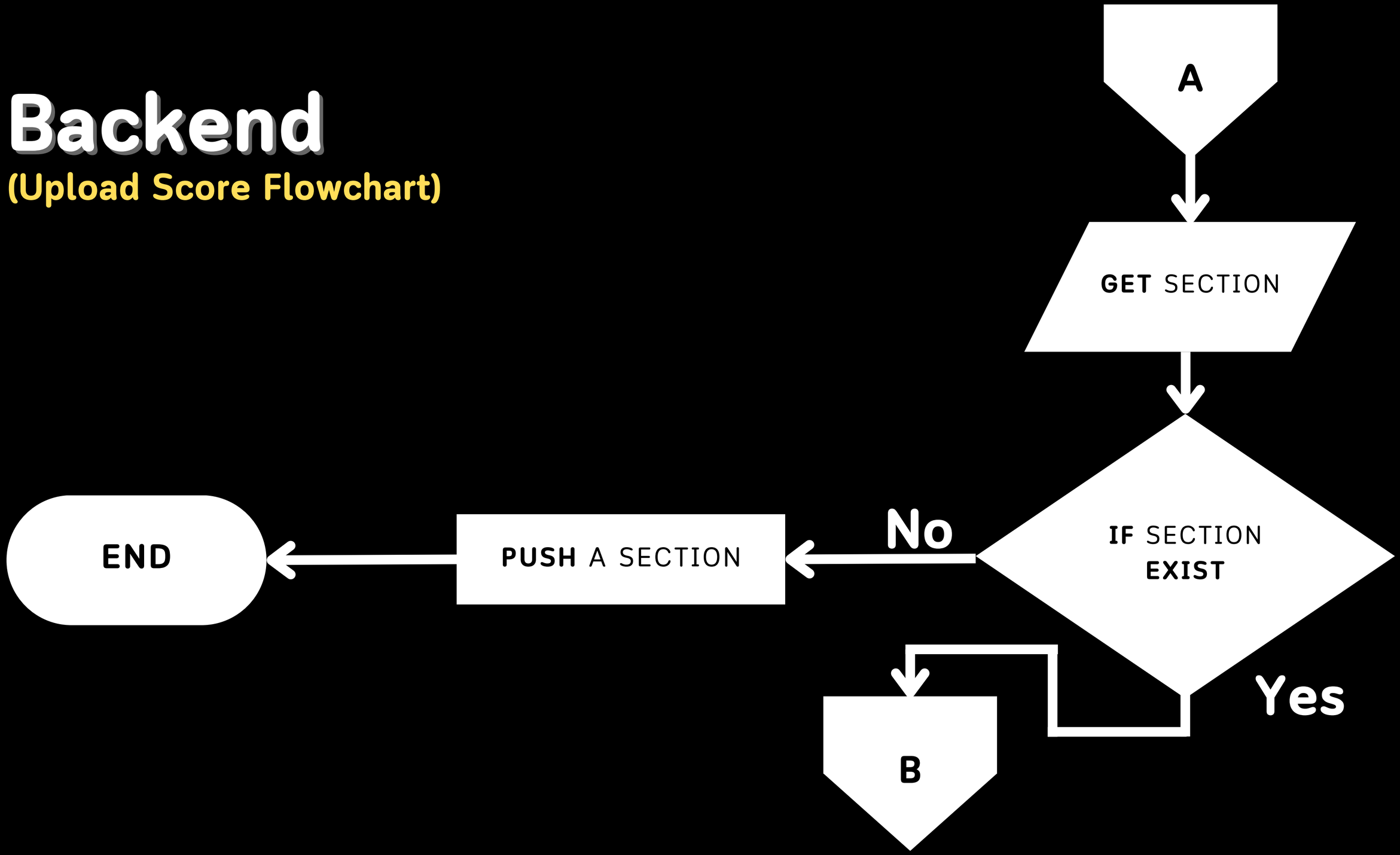
Backend

(Upload Score Flowchart)



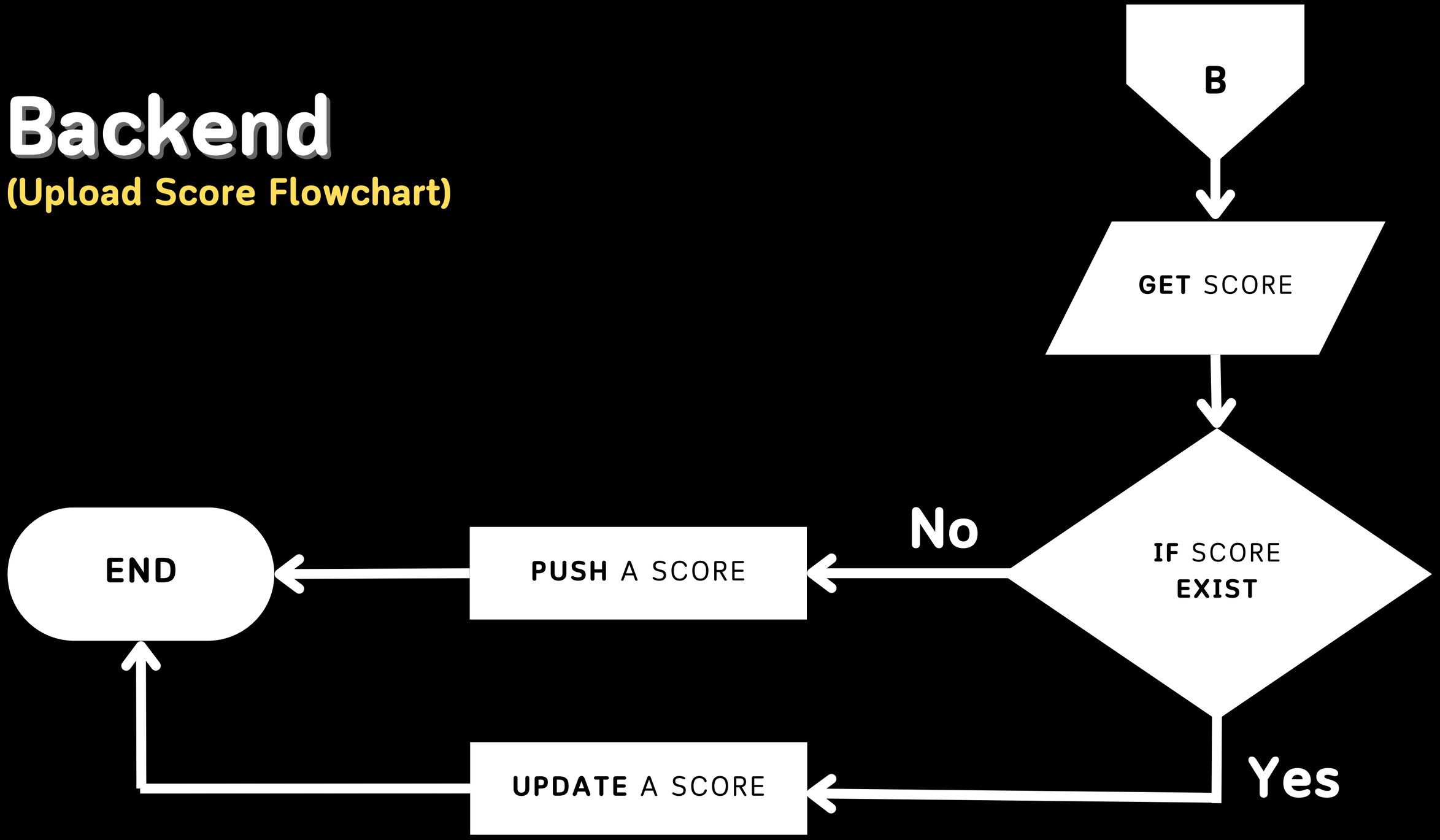
Backend

(Upload Score Flowchart)



Backend

(Upload Score Flowchart)



Backend

Publish Score

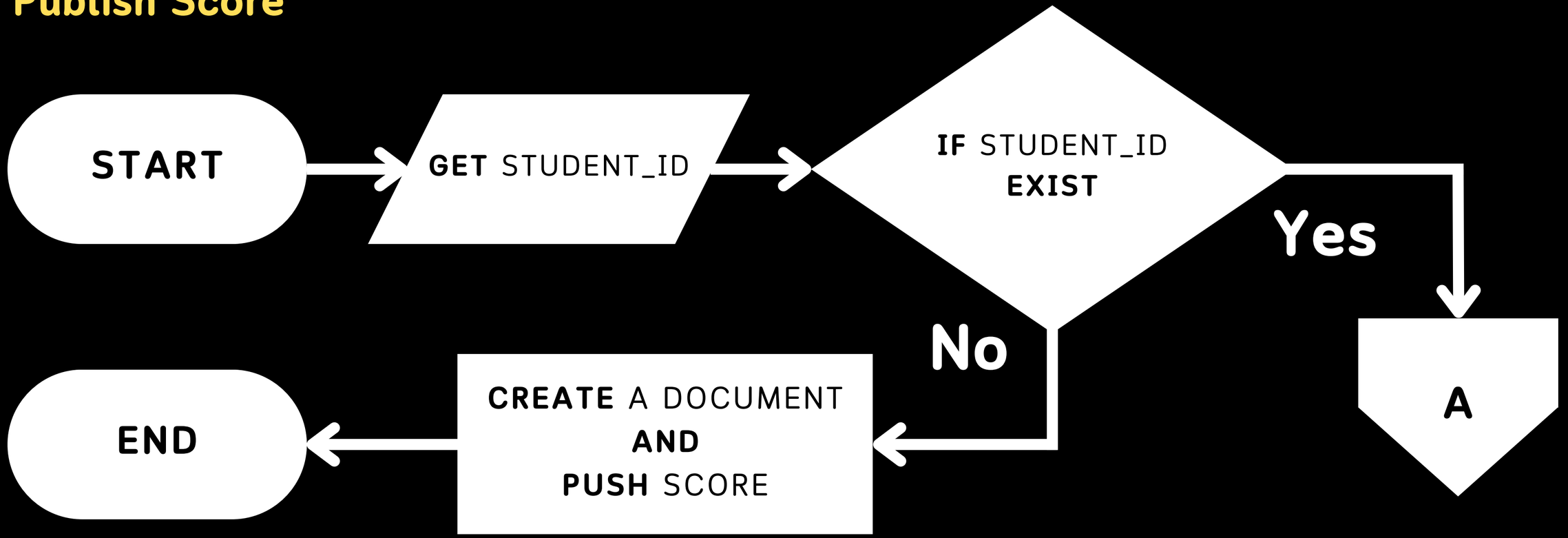
There are 3 cases of score announcement

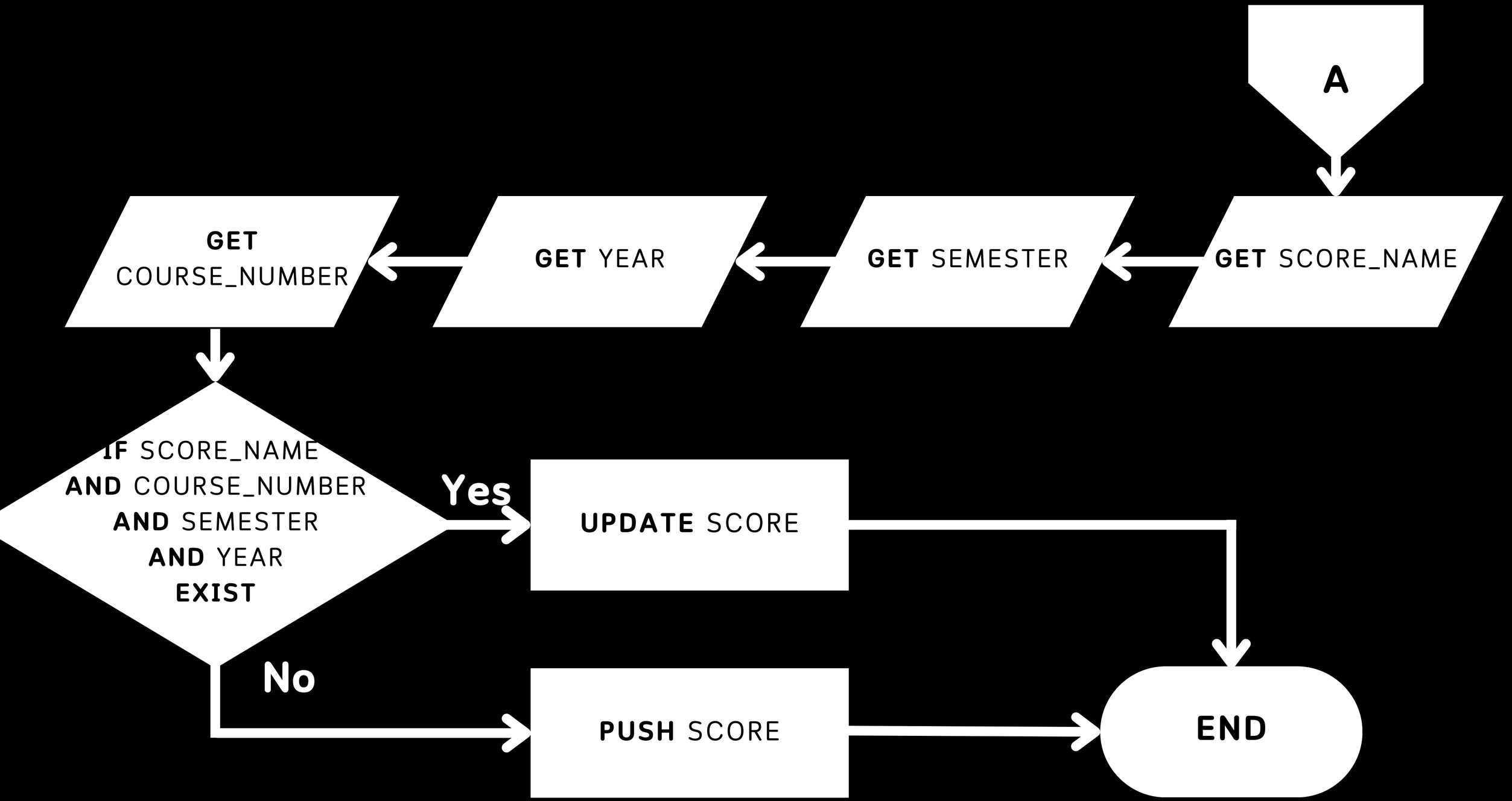
1. Publish each score
2. Publish each section
3. Publish all sections

So, how publish a score looks like?

Backend

Publish Score




A
GET SCORE_NAME
GET SEMESTER
GET YEAR
GET COURSE_NUMBER
IF SCORE_NAME AND COURSE_NUMBER AND SEMESTER AND YEAR EXIST
Yes
No
UPDATE SCORE
PUSH SCORE
END

Frontend

Frontend

UI Design

Figma

Frontend

Component Library

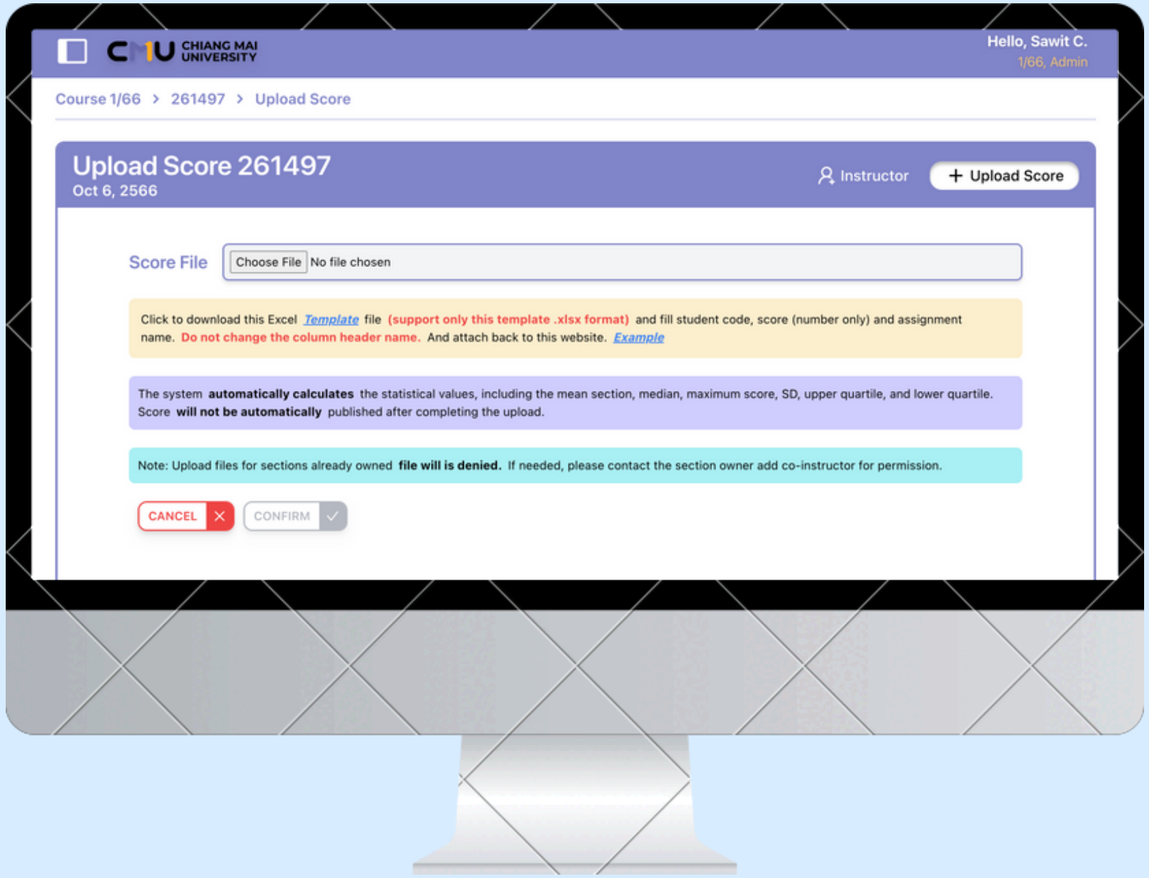
tailwindcss

Mantine

Function

Instructor

- Course and Semester Selection
- Score Upload via Spreadsheet (.xls format only)
- Detect Character In Spreadsheet
- Multiple Assignments and Sections
- Flexible Score Selection
- Automatic Statistic Calculation
- Publishing Function
- Add/Delete Course
- Autofill Course Name[2]
- Add Co-Instructor
- Edit Score Each Student
- Responsive Display



2. Course names that have an API

Function

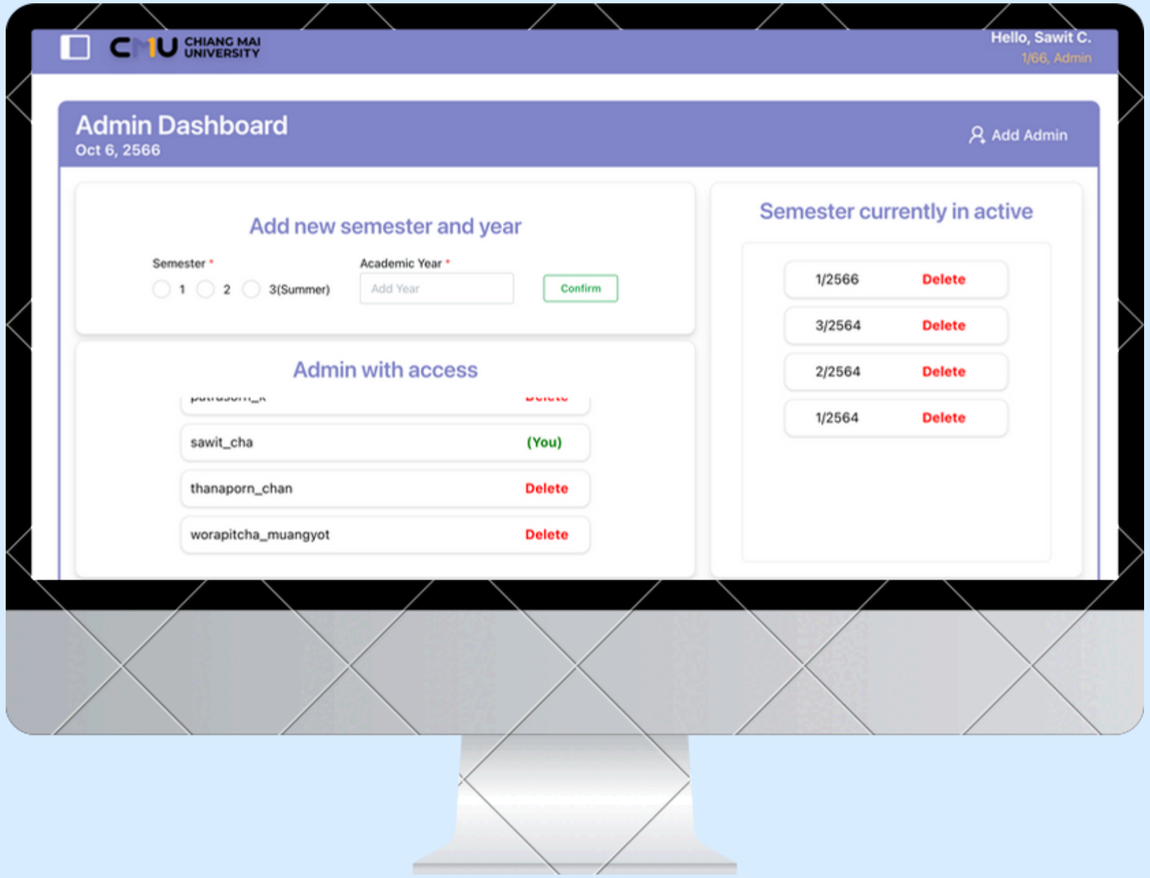
Student

- Personal Score Access
- Statistical Values Display
- Subject-wise Score Graphs
- Responsive Display

Function

Admin

- Universal Page Access
- Academic Calendar Management
- Admin User Management
- Responsive Display



3 Roles

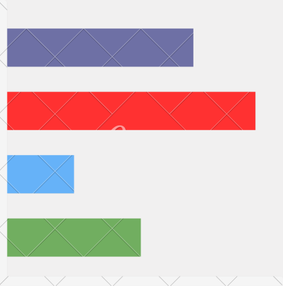
Course
Semester
Selection

Add
Delete
Course

Statistic
Value

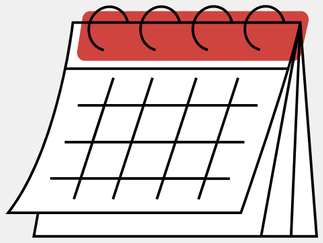
$$\sum \quad \overline{x} \quad \sigma$$

Score Graph



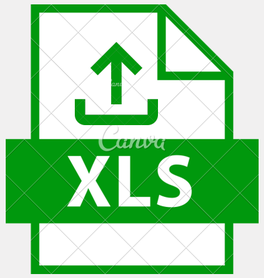
Horizontal Graph

Calendar
Management



CMU SCORE ANNOUNCEMENT

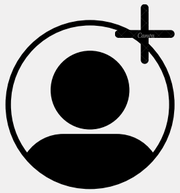
Publish
Function



Upload via
.xls format

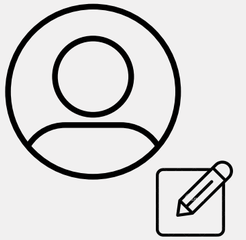
Responsive
Display

Autofill
Course Name



Add
Co-Instructor

Character
Detect



Edit Score
Individual

Join with us!

Login via CMUOauth

เดี๋ยวจะประกาศคะแนนวิชา
Data Structure ของปีที่แล้ว

Demo