# DEPARTMENT MANAGEMENT SYSTEM


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**GROUP 11 MEMBERS**

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| SREERAG P | 31 |
| SUBITH O U | 32 |
| VIPINDAS K | 37 |

# INTRODUCTION

- To enhance the functionalities of the routine works of the department, we propose a web-based management system.
- Details are stored in an efficient manner to handle the students and staffs records effectively.
- Helps to monitor the activities that take place in the department.
- Making the department data management system more efficient.

# FEATURES

- Student/Staff profile
- Student data management
- Student & class performance analysis
- Provide study Material

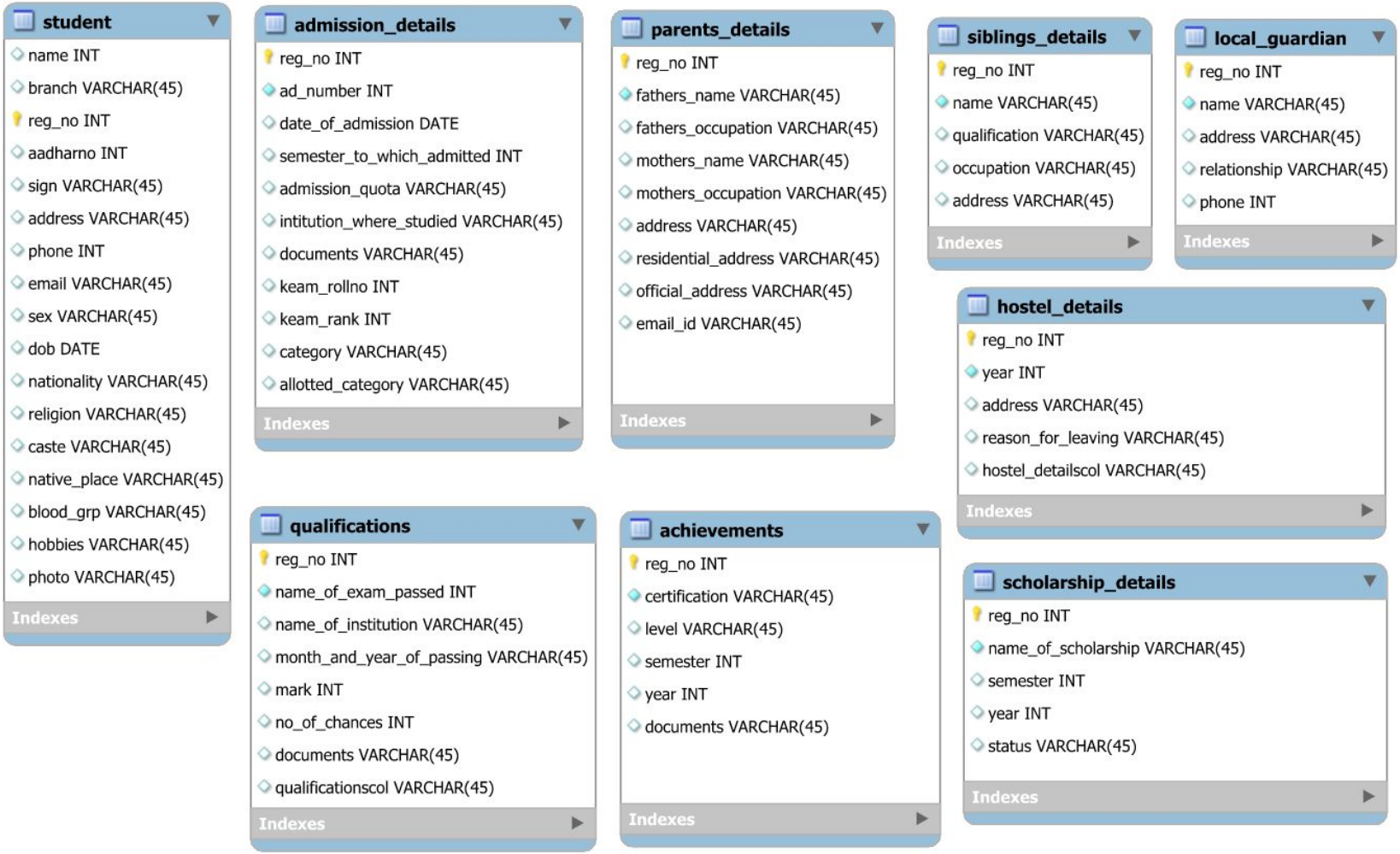
# IMPLEMENTATION

The web application is developing using the python Django framework and NoSql, and the analysis is with machine learning.

# MODULES

- ADMIN
- HOD
- STAFF
- STUDENT

# TABLES


student
name INT
branch VARCHAR(45)
reg_no INT
aadharno INT
sign VARCHAR(45)
address VARCHAR(45)
phone INT
email VARCHAR(45)
sex VARCHAR(45)
dob DATE
nationality VARCHAR(45)
religion VARCHAR(45)
caste VARCHAR(45)
native_place VARCHAR(45)
blood_grp VARCHAR(45)
hobbies VARCHAR(45)
photo VARCHAR(45)
Indexes
admission_details
reg_no INT
ad_number INT
date_of_admission DATE
semester_to_which_admitted INT
admission_quota VARCHAR(45)
intitution_where_studied VARCHAR(45)
documents VARCHAR(45)
keam_rollno INT
keam_rank INT
category VARCHAR(45)
allotted_category VARCHAR(45)
Indexes
parents_details
reg_no INT
fathers_name VARCHAR(45)
fathers_occupation VARCHAR(45)
mothers_name VARCHAR(45)
mothers_occupation VARCHAR(45)
address VARCHAR(45)
residential_address VARCHAR(45)
official_address VARCHAR(45)
email_id VARCHAR(45)
Indexes
siblings_details
reg_no INT
name VARCHAR(45)
qualification VARCHAR(45)
occupation VARCHAR(45)
address VARCHAR(45)
Indexes
local_guardian
reg_no INT
name VARCHAR(45)
address VARCHAR(45)
relationship VARCHAR(45)
phone INT
Indexes
hostel_details
reg_no INT
year INT
address VARCHAR(45)
reason_for_leaving VARCHAR(45)
hostel_detailscol VARCHAR(45)
Indexes
qualifications
reg_no INT
name_of_exam_passed INT
name_of_institution VARCHAR(45)
month_and_year_of_passing VARCHAR(45)
mark INT
no_of_chances INT
documents VARCHAR(45)
qualificationscol VARCHAR(45)
Indexes
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reg_no INT
certification VARCHAR(45)
level VARCHAR(45)
semester INT
year INT
documents VARCHAR(45)
Indexes
scholarship_details
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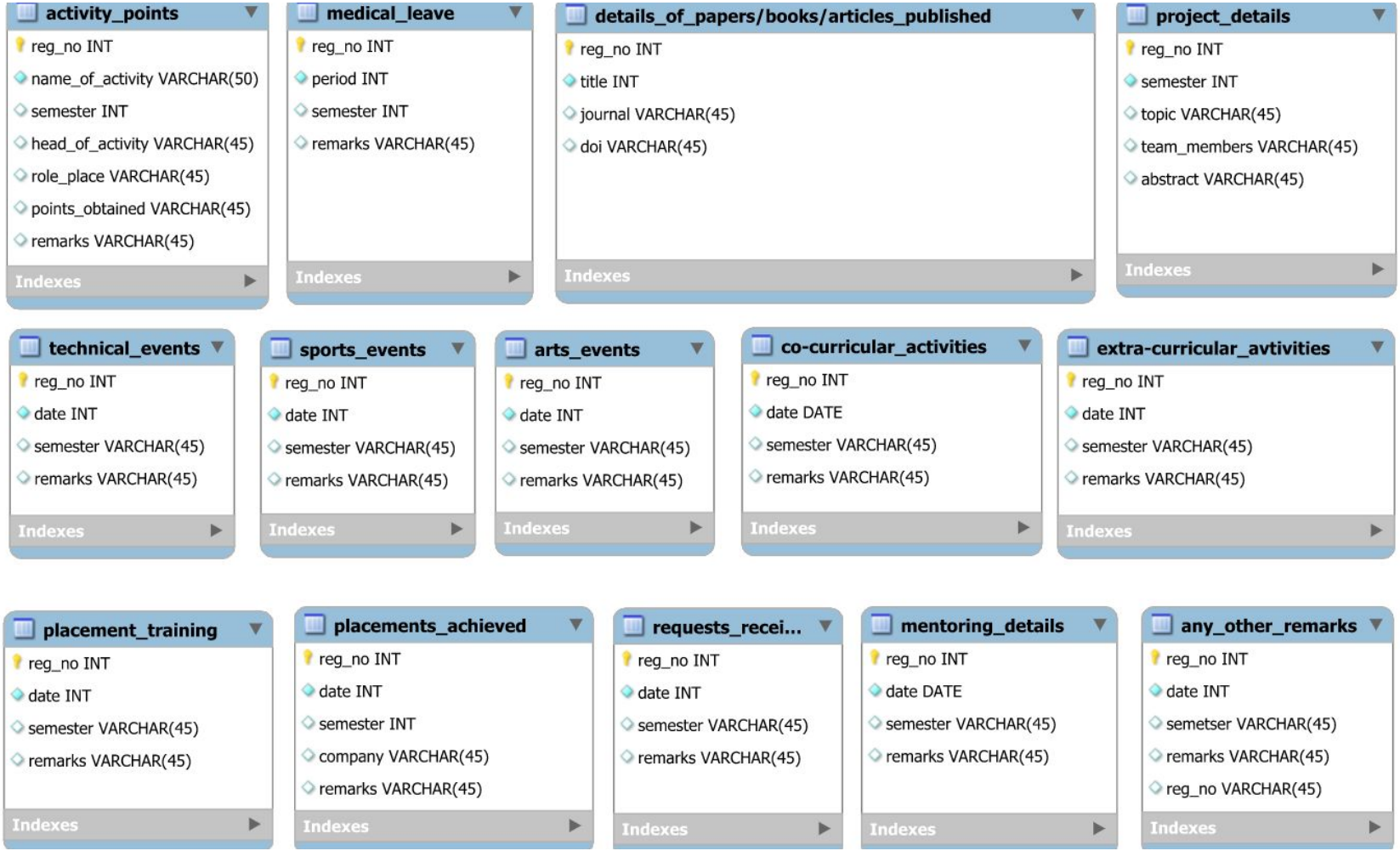
name_of_scholarship VARCHAR(45)
semester INT
year INT
status VARCHAR(45)
Indexes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semester INT
head_of_activity VARCHAR(45)
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points_obtained VARCHAR(45)
remarks VARCHAR(45)
Indexes
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period INT
semester INT
remarks VARCHAR(45)
Indexes
details_of_papers/books/articles_published
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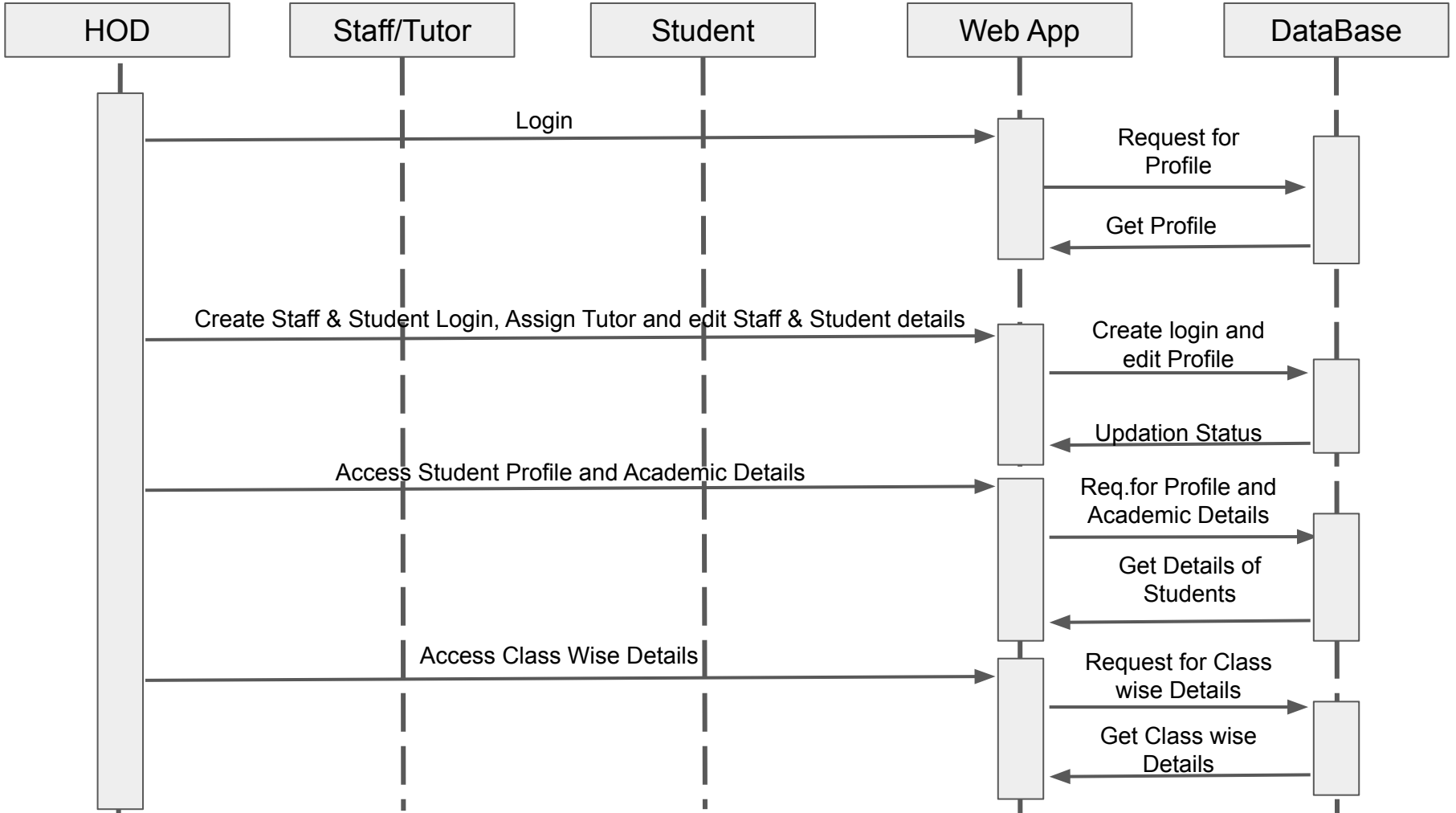
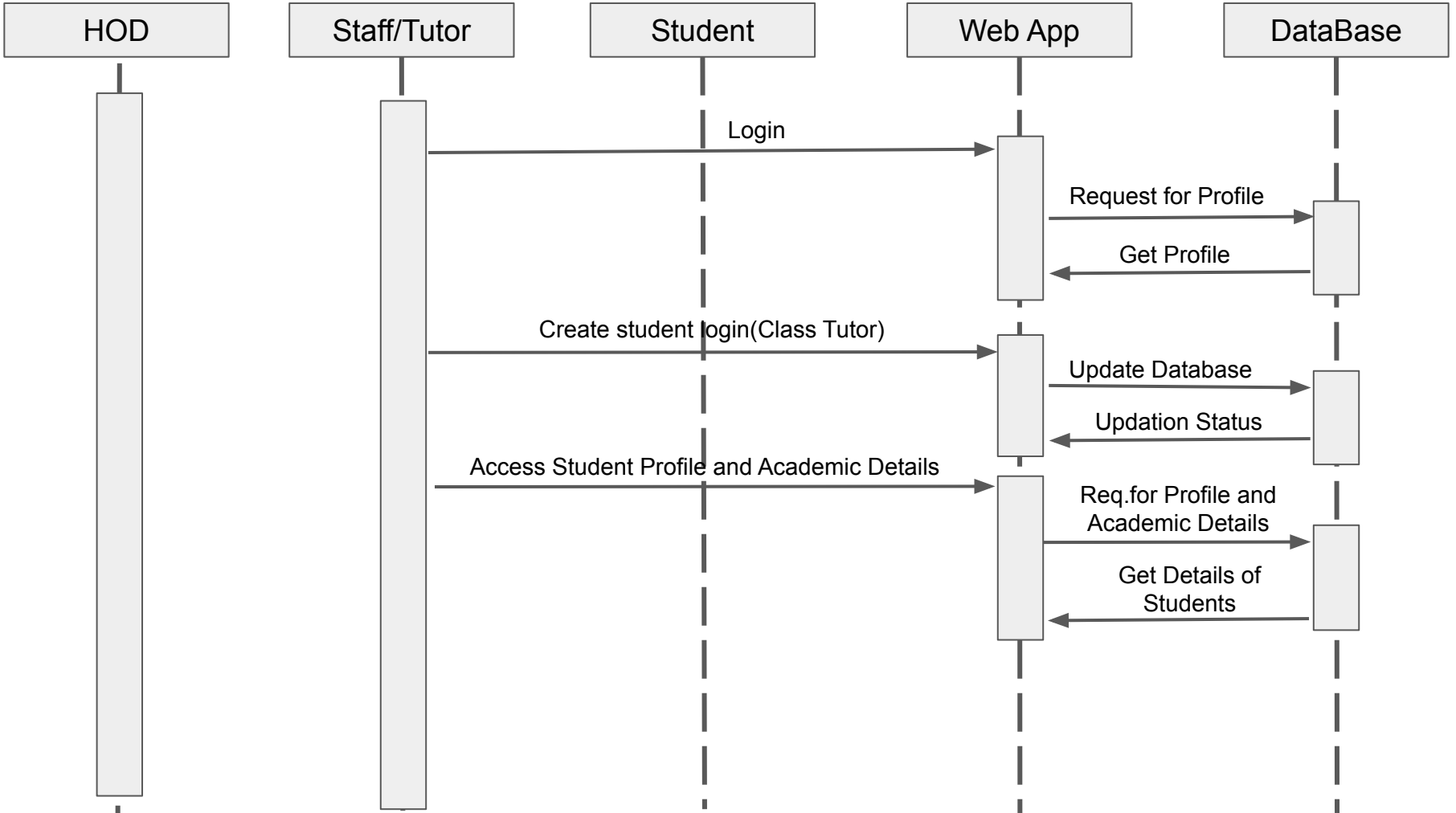
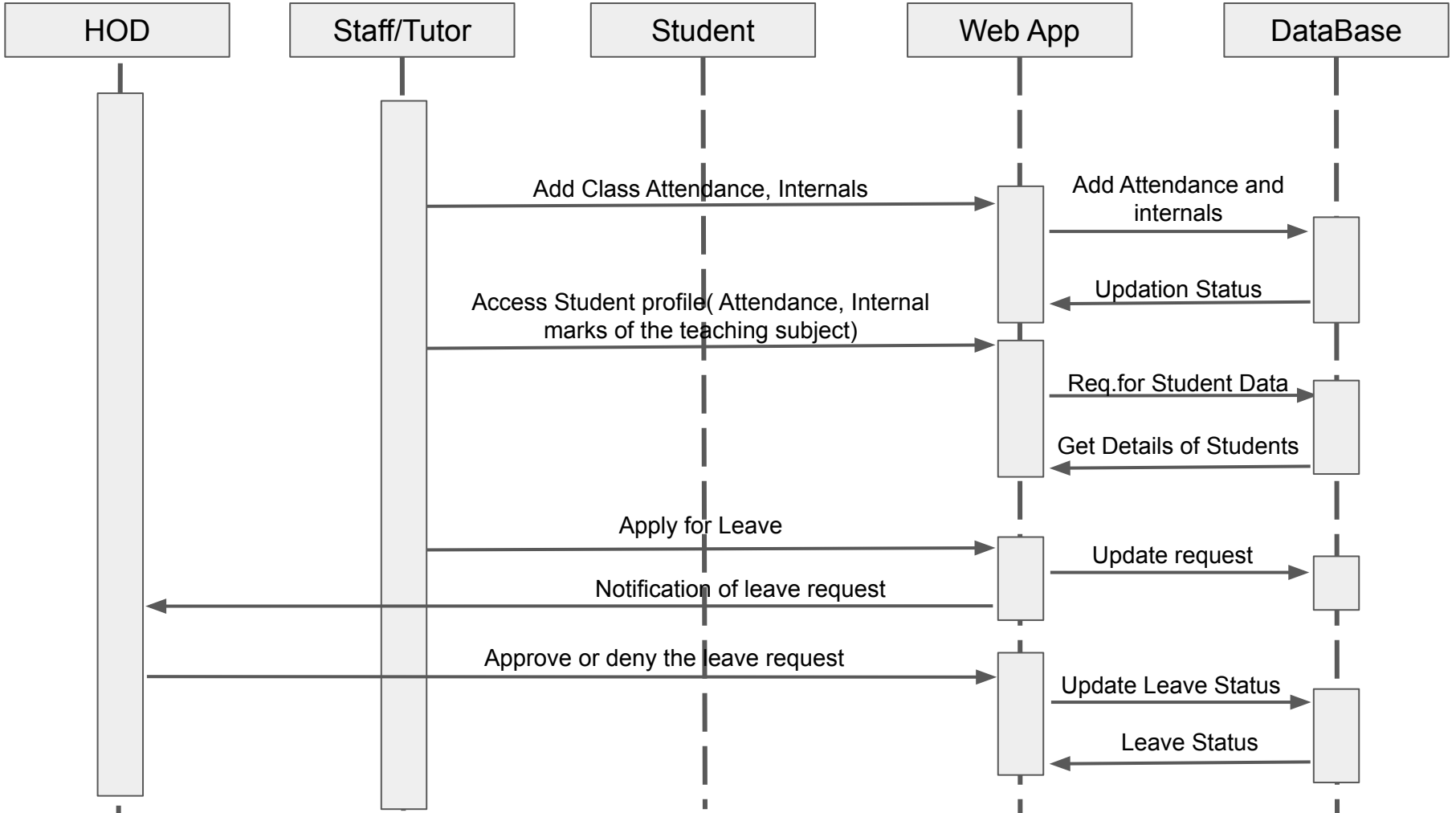
title INT
journal VARCHAR(45)
doi VARCHAR(45)
Indexes
project_details
reg_no INT
semester INT
topic VARCHAR(45)
team_members VARCHAR(45)
abstract VARCHAR(45)
Indexes
technical_events
reg_no INT
date INT
semester VARCHAR(45)
remarks VARCHAR(45)
Indexes
sports_events
reg_no INT
date INT
semester VARCHAR(45)
remarks VARCHAR(45)
Indexes
arts_events
reg_no INT
date INT
semester VARCHAR(45)
remarks VARCHAR(45)
Indexes
co-curricular_activities
reg_no INT
date DATE
semester VARCHAR(45)
remarks VARCHAR(45)
Indexes
extra-curricular_avtivities
reg_no INT
date INT
semester VARCHAR(45)
remarks VARCHAR(45)
Indexes
placement_training
reg_no INT
date INT
semester VARCHAR(45)
remarks VARCHAR(45)
Indexes
placements_achieved
reg_no INT
date INT
semester INT
company VARCHAR(45)
remarks VARCHAR(45)
Indexes
requests_recei...
reg_no INT
date INT
semester VARCHAR(45)
remarks VARCHAR(45)
Indexes
mentoring_details
reg_no INT
date DATE
semester VARCHAR(45)
remarks VARCHAR(45)
Indexes
any_other_remarks
reg_no INT
date INT
semetser VARCHAR(45)
remarks VARCHAR(45)
reg_no VARCHAR(45)
Indexes

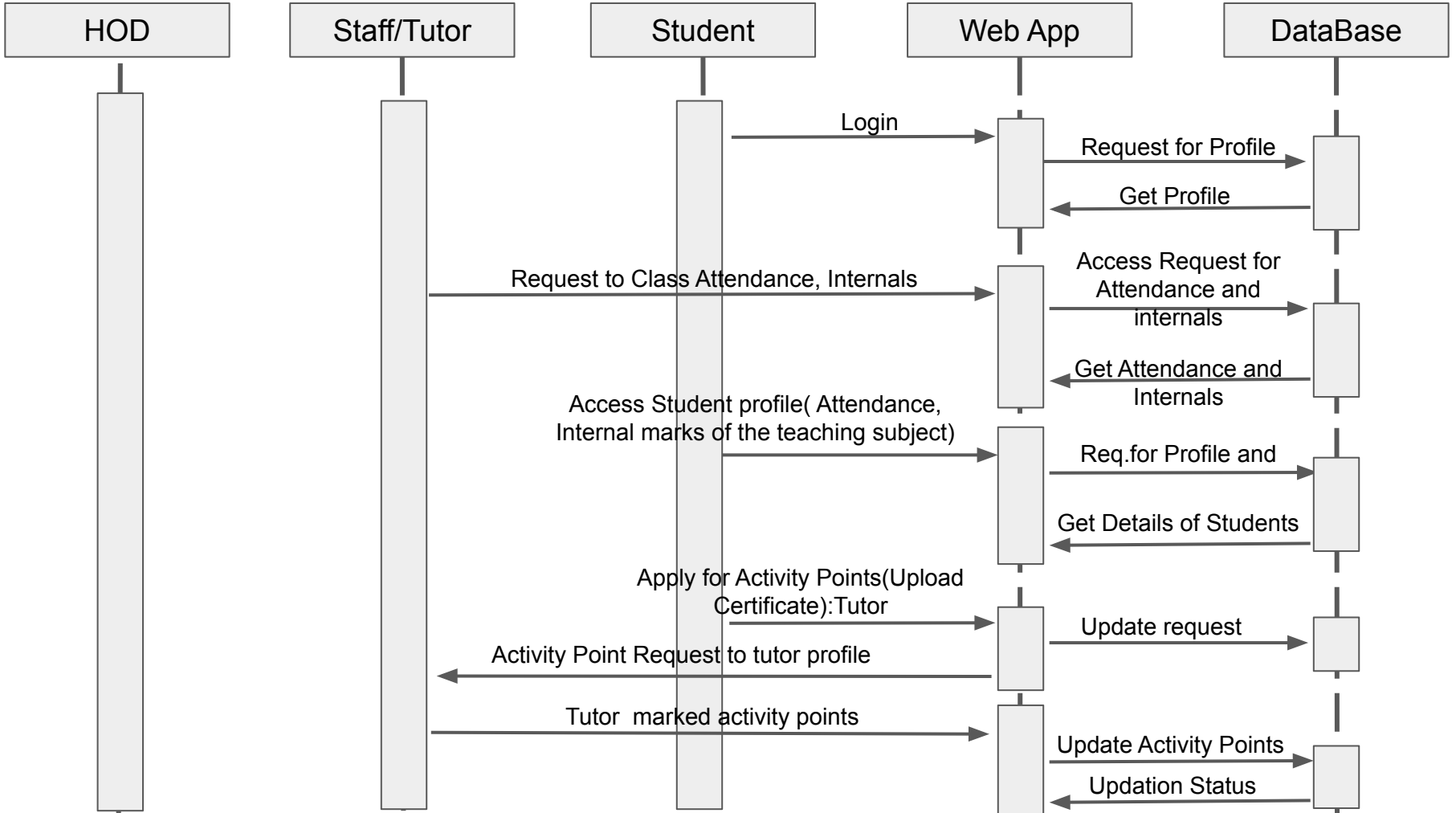
staff
name VARCHAR(50)
faculty_unique_id VARCHAR(45)
gender VARCHAR(45)
dob VARCHAR(45)
aadhaar_no VARCHAR(45)
caste VARCHAR(45)
religion VARCHAR(45)
category VARCHAR(45)
pan VARCHAR(45)
date_of_joining VARCHAR(45)
aicte_unique_id VARCHAR(45)
appoinyment_type VARCHAR(45)
cadre VARCHAR(45)
designation VARCHAR(45)
specialisation VARCHAR(45)
dept_of_program VARCHAR(45)
examiner_institution VARCHAR(45)
area_of_research VARCHAR(45)
Indexes

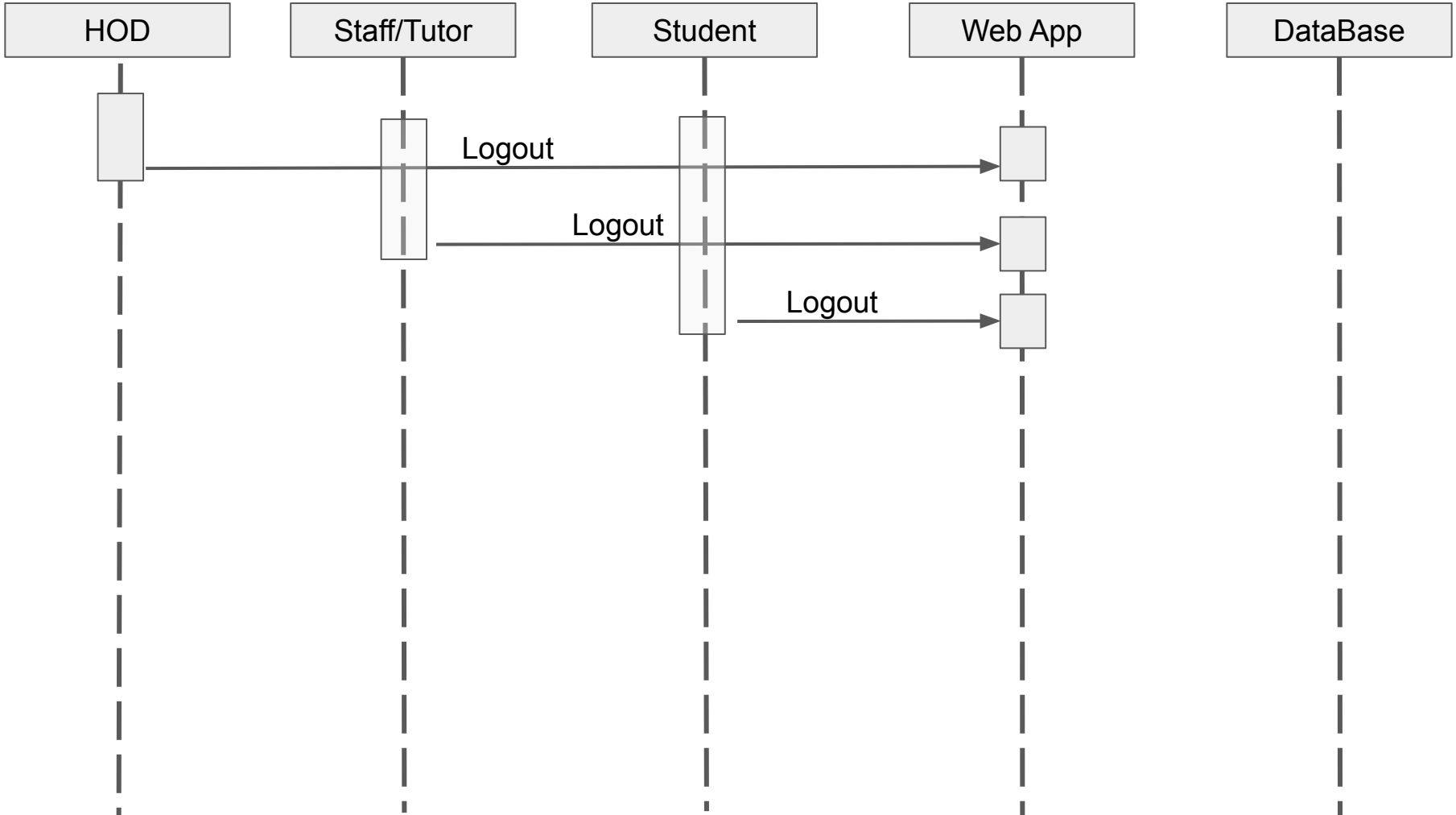
# SEQUENCE DIAGRAM


HOD
Staff/Tutor
Student
Web App
DataBase
Login
Request for Profile
Get Profile
Create Staff & Student Login, Assign Tutor and edit Staff & Student details
Create login and edit Profile
Updation Status
Access Student Profile and Academic Details
Req.for Profile and Academic Details
Get Details of Students
Access Class Wise Details
Request for Class wise Details
Get Class wise Details


HOD
Staff/Tutor
Student
Web App
DataBase
Login
Request for Profile
Get Profile
Create student login(Class Tutor)
Update Database
Updation Status
Access Student Profile and Academic Details
Req.for Profile and Academic Details
Get Details of Students


HOD
Staff/Tutor
Student
Web App
DataBase
Add Class Attendance, Internals
Add Attendance and internals
Updation Status
Access Student profile( Attendance, Internal marks of the teaching subject)
Req.for Student Data
Get Details of Students
Apply for Leave
Update request
Notification of leave request
Approve or deny the leave request
Update Leave Status
Leave Status


HOD
Staff/Tutor
Student
Web App
DataBase
Login
Request for Profile
Get Profile
Request to Class Attendance, Internals
Access Request for Attendance and internals
Get Attendance and Internals
Access Student profile( Attendance, Internal marks of the teaching subject)
Req.for Profile and
Get Details of Students
Apply for Activity Points(Upload Certificate):Tutor
Update request
Activity Point Request to tutor profile
Tutor marked activity points
Update Activity Points
Updation Status


HOD
Staff/Tutor
Student
Web App
DataBase
Logout
Logout
Logout

# BENEFITS

- Effective management of department data.
- A way for students performance analysis.
- Evaluate and improve Class Performance

# CONCLUSION

- The overall speedup is considerably higher than the manual work.
- Helps to monitor the marks of the students and analyze their performance.

# THANK YOU …