

PLACEMENT PREDICTION AND MANAGEMENT SYSTEM

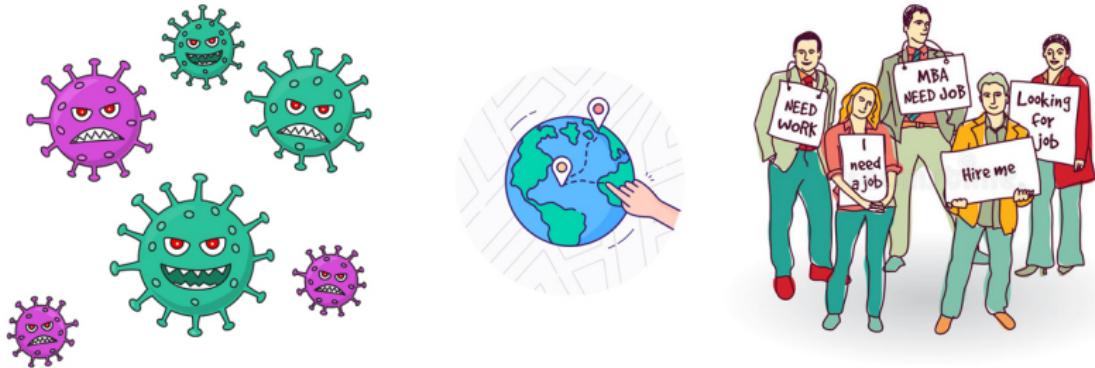
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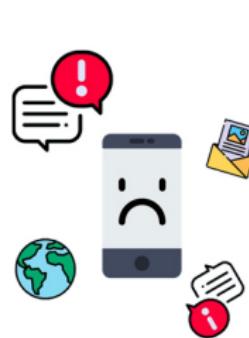
Introduction

- Pandemic caused a drop in the number of students getting placed.
- Apply and attend Interviews to get jobs or internships.
- Companies can post Job/Internship details.
- Externally posted jobs via third party APIs.



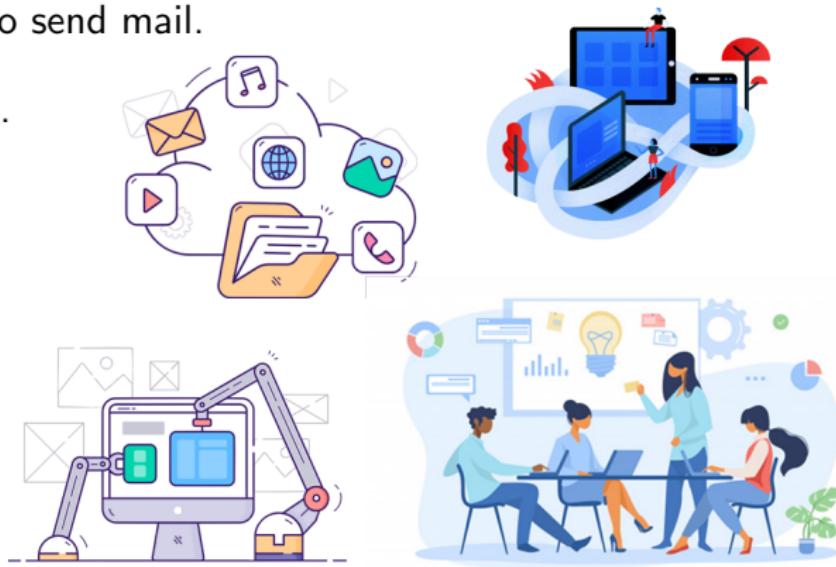
Existing System

- Manual/partially manual.
- Collected data is sent through third party applications.
- Bugs and user experiences issues.
- Sort and filter applications manually.
- Security issues.



Proposed System

- Stores previous placement statistics & recruiter details.
- Skill recommendation.
- Templates available to send mail.
- Placement Prediction.
- Resource Sharing.



Modules

□ Guest:

- Unregistered users.
- Can see publicly available information.
- Statistics, Gallery, Coordinators



Modules . . .

Student:

- Apply for Jobs/Internships.
- Add Profile, CV, Certificates.
- Custom Resume.



Modules . . .

□ Company:

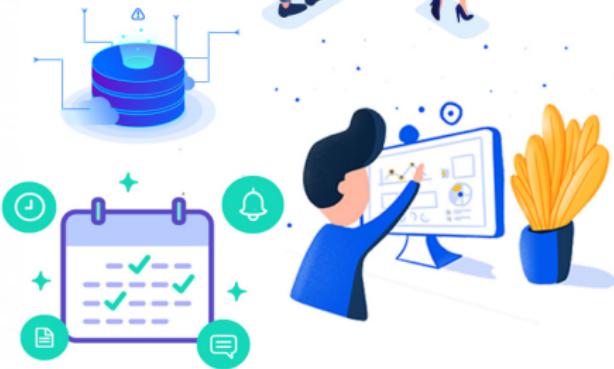
- Post jobs.
- Schedule Interview
- View profile of applied students.
- Recruit Students



Modules . . .

Placement Coordinator:

- Faculties or student representatives.
- View and upload gallery images.
- View and upload resources.



Modules . . .

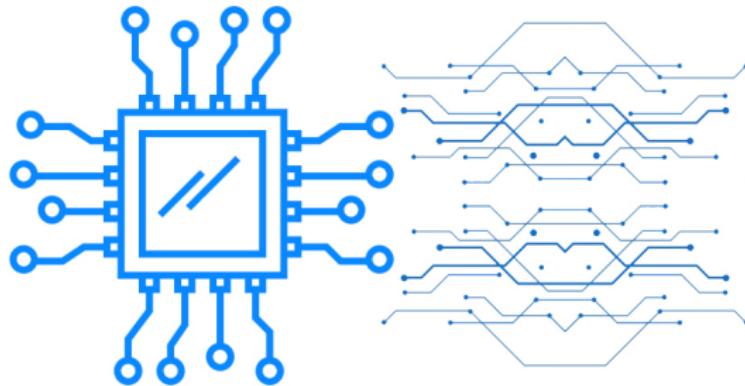
□ Administrator:

- A faculty or a student representative.
- Add Recruiter account.
- Approve Schedule.
- Add Department and Course.
- Train ML Model.
- Dumping previous data.



Hardware Requirements

- Server RAM : 1 GB (or greater)
- Server HDD : 5 GB (or greater)
- Client RAM : 512 MB (or greater)



Software Requirements

- Server OS : Windows/Ubuntu/MAC
- Client OS : Any OS with a browser
- Server : Node.js
- Database Server : Mongo db



Collection

```
1  {
2      "name": Department Name,
3      "courses": [
4          {
5              "name": Course Name,
6              "num_of_sem": number of semesters
7          }
8      ],
9      "engineering": engineering or not
10 }
```

Department

Collection

```
1  {
2      "year": year,
3      "departments": {
4          "department name": number of placements|
5      }
6  }
```

Statistics

Collection

```
1  {
2      "email": email,
3      "password": password,
4      "type": "admin",
5      "messages": [
6          {
7              "from": from email,
8              "name": name,
9              "type": message type,
10             "message": message,
11             "date": timestamp
12         }
13     ]
14 }
```

Admin

Collection

```

1  [
2      "email": email,
3      "data": {
4          "name": company name,
5          "website": website,
6          "job": {
7              "title": job title,
8              "type": type of job,
9              "date": timestamp,
10             "salary": salary,
11             "mhskills": [
12                 compulsory skills
13             ],
14             "ghskills": [
15                 good to have skills
16             ],
17             "description": description,
18             "vacancy": vacancy,
19             "rounds": rounds,
20             "applied": [
21                 student id
22             ],
23             "selected": [
24                 student id
25             ],
26         }
27     }
28 ]

```

```

"vacancy": vacancy,
"rounds": rounds,
"applied": [
    student id
],
"selected": [
    student id
],
"schedule": {
    "recruiteraccepted": true/false,
    "adminaccepted": true/false,
    "date": date
}
},
"type": "recruiter",
"password": password,
"messages": [
    {
        "from": Sender Email,
        "name": Sender name,
        "message": message,
        "type": type,
        "date": timestamp
    }
]

```

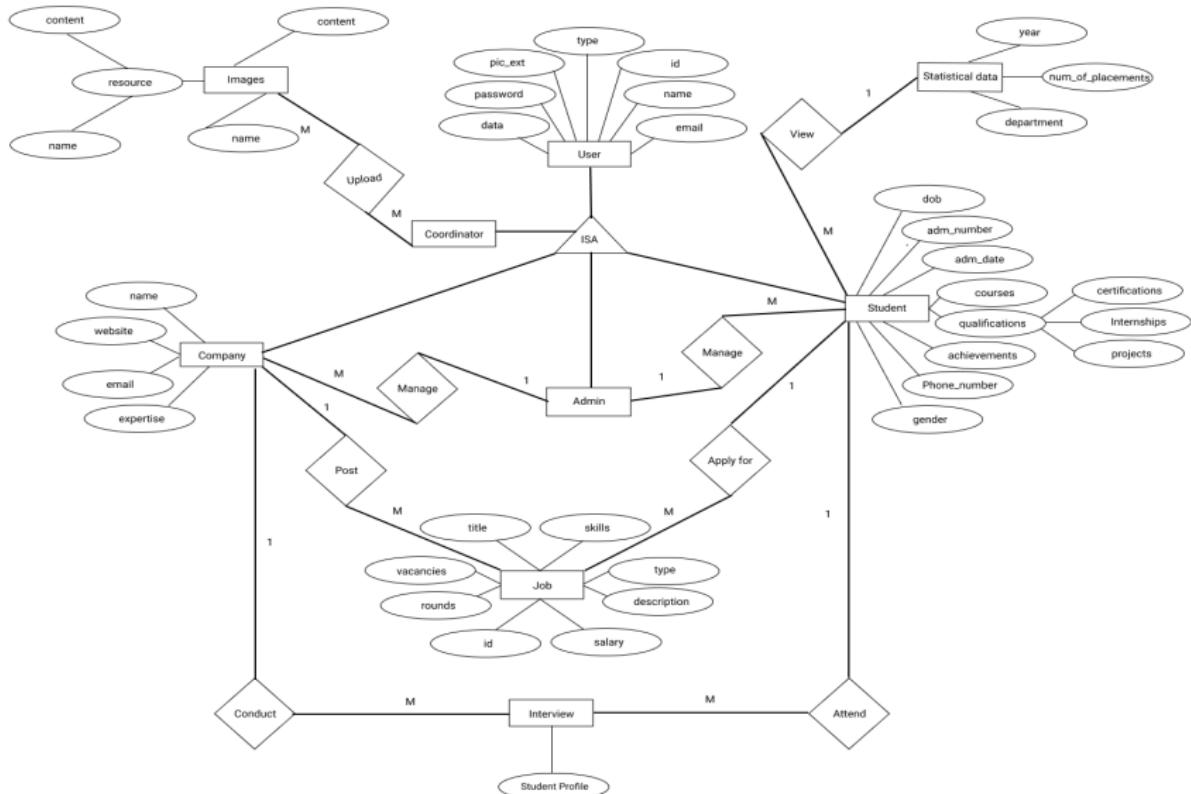
Recruiter

Collection

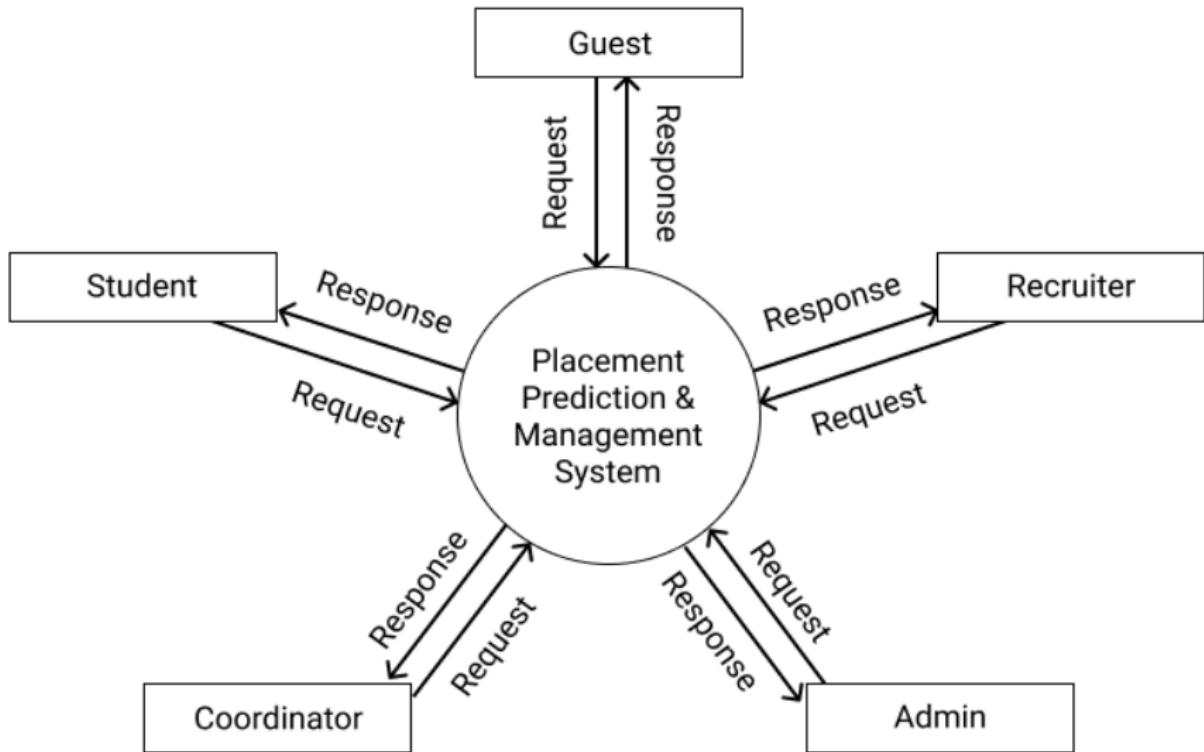
1 {			
2 "email": email,		"placed": placed or not	43
3 "password": password,		},	44
4 "type": "student",		"education": {	45
5 "messages": [{		"sslc": {	46
6 "title": title,		"board": board,	47
7 "message": messages		"school": school name,	48
8 }],		"mark": mark,	49
9 "otp": verified/generated,		"passdate": passout date	50
10 "data": {		},	51
11 "name": name,		"plustwo": {	52
12 "about": about,		"board": board,	53
13 "phone": phone,		"school": school name,	54
14 "gender": gender,		"mark": mark,	55
15 "dob": dob,		"passdate": passout date	56
16 "admission": {		},	57
17 "number": admission number,		"course": [{	58
18 "type": type,		"type": type,	59
19 "year": year,		"name": name,	60
20 "department": department id,		"college": college name,	61
21 "course": course name,		"cgpa": mark,	62
22 "semester": current sem,		"passdate": passout date	63
23 "arrears": active arrears,		}	64
24 "engineering": engineering or not,		},	65
25 "passdate": passout date,		"experience": [{	66
26 "placed": placed or not		"type": type,	67
		}],	
		"skills": [skills]	
		},	
		"pic_ext": profile pic extension	

Recruiter

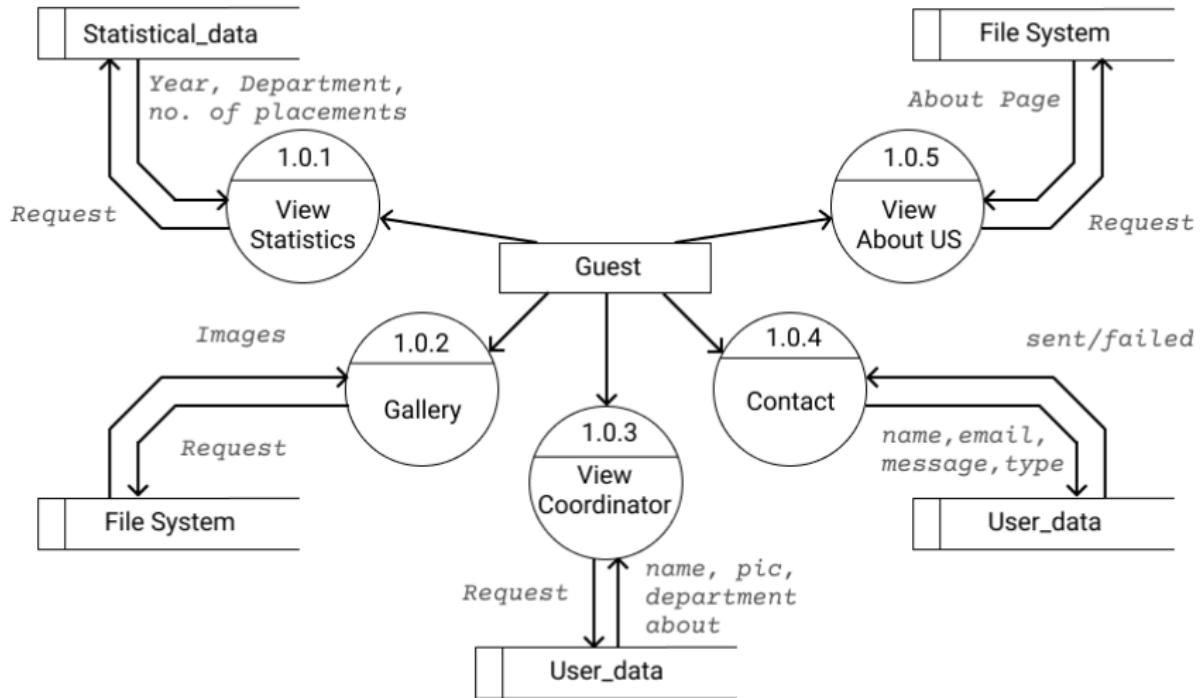
E-R Diagram



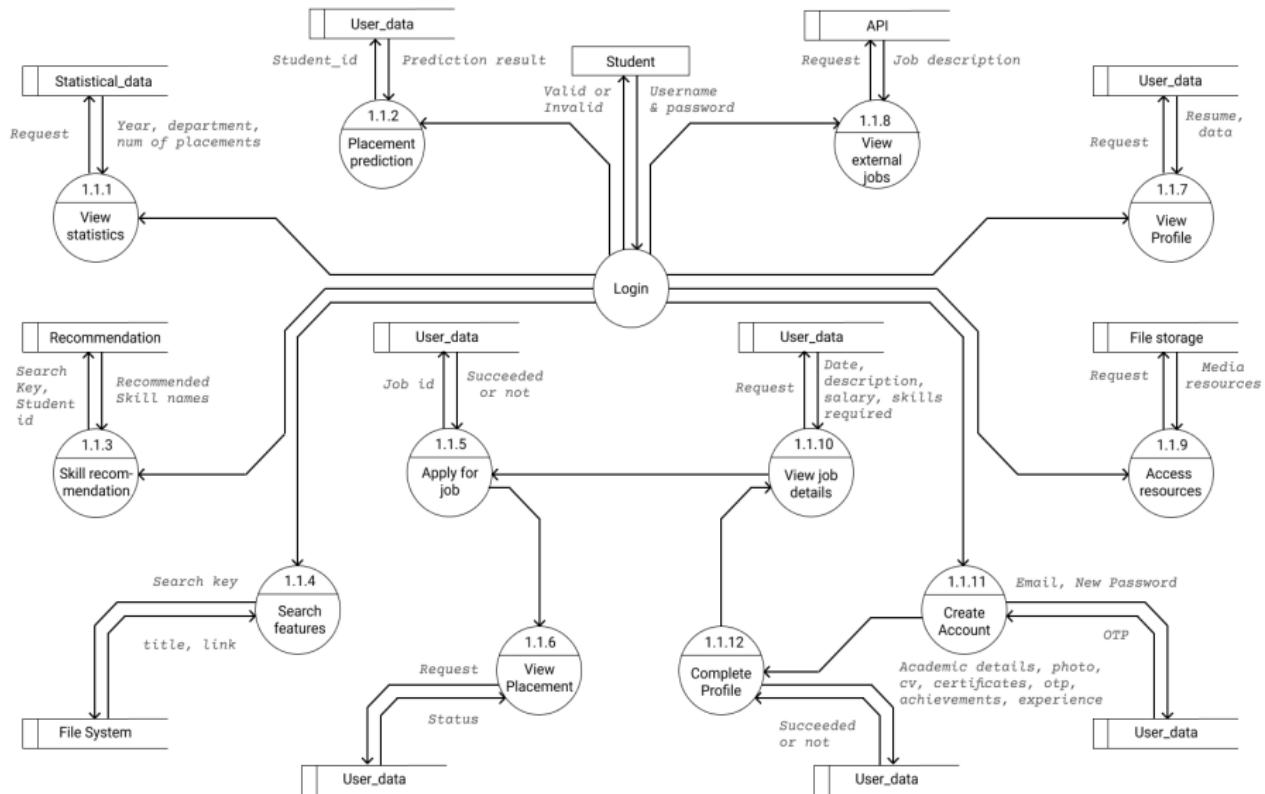
Level 0



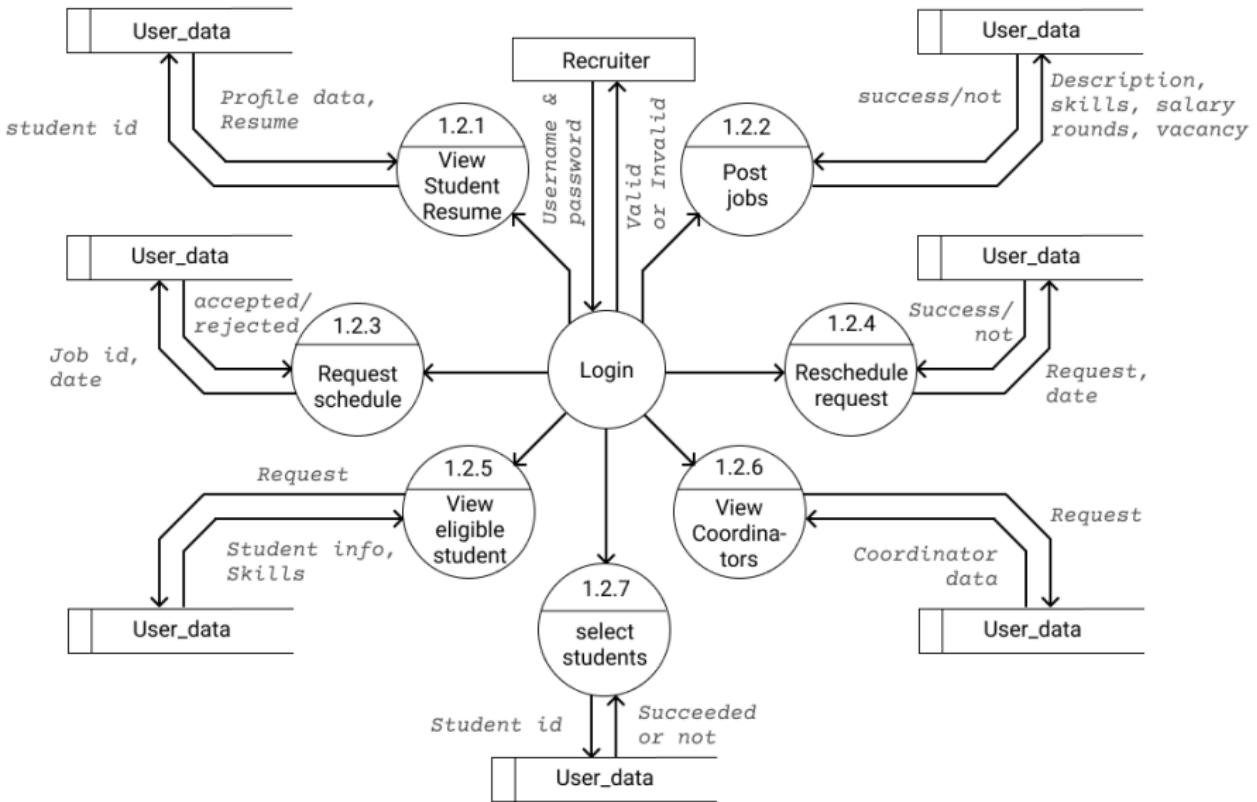
Level 1.0



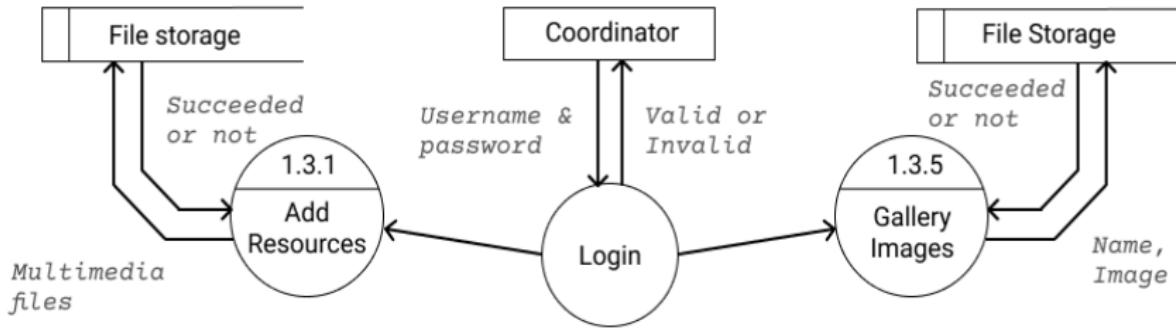
Level 1.1



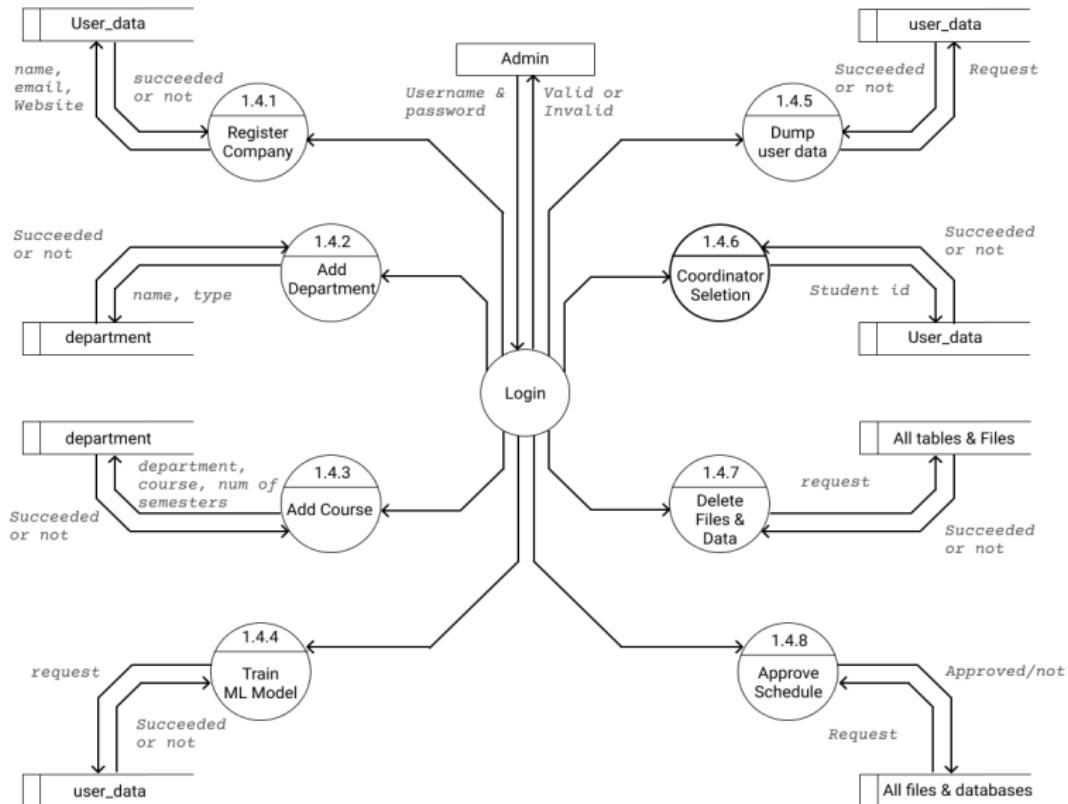
Level 1.2



Level 1.3



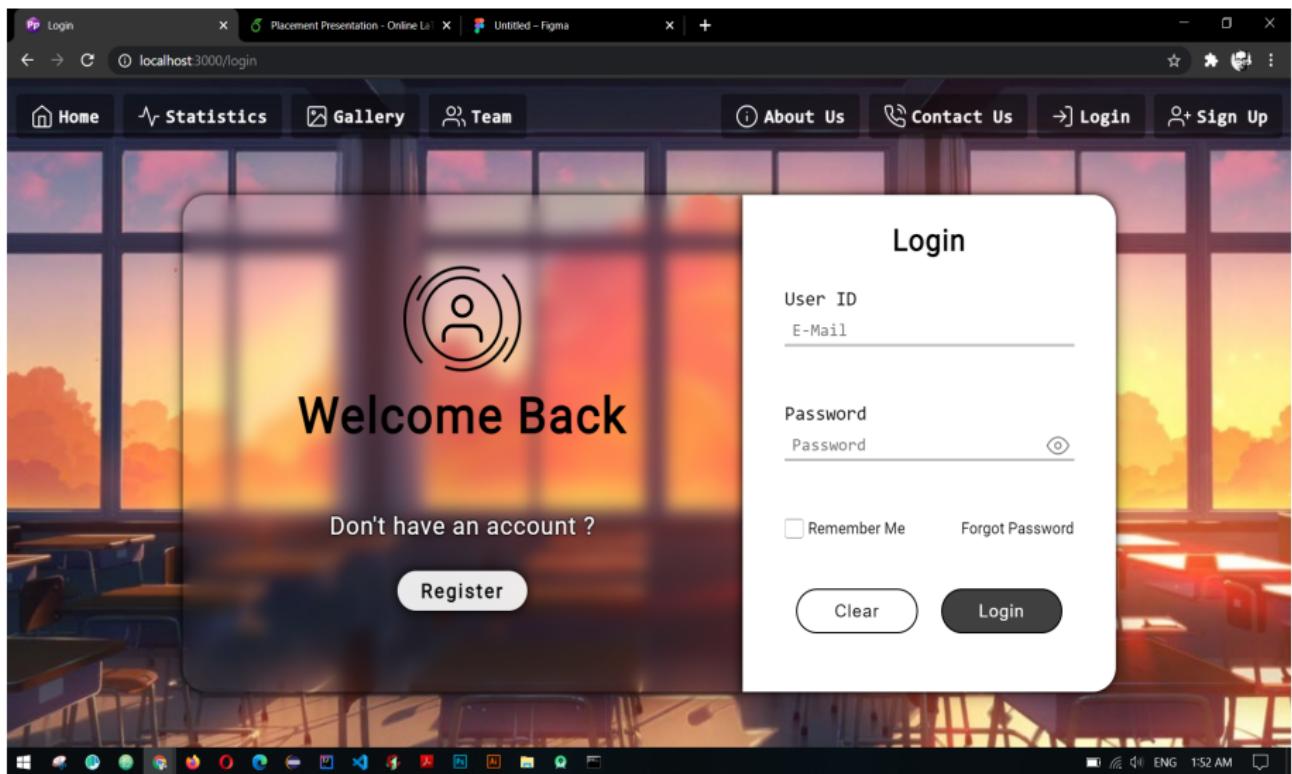
Level 1.4



Screenshot

The screenshot shows a web browser window displaying the homepage of a placement management system. The URL in the address bar is `localhost:3000/home`. The page features a large purple hexagonal logo on the left containing the letters 'Pp'. To the right of the logo, the title 'Placement Prediction & Management System' is displayed in a large, bold, dark blue font. Below the title, there is a search bar with the placeholder text 'Campus Placement'. The main content area includes a navigation bar with links for Home, Statistics, Gallery, Team, About Us, Contact Us, Login, and Sign Up. To the right of the navigation bar is a decorative graphic featuring various school-related icons like a magnifying glass, a clock, books, a graduation cap, and an apple, all set against a green and white abstract background.

Screenshot



Screenshot

The screenshot shows the PPMS (Placement Prediction & Management System) dashboard. At the top, there are tabs for 'Dashboard' (selected), 'Placement Presentation - Online La...', and 'Untitled - Figma'. The main header includes the PPMS logo, version 2.0.0, and a search bar. On the left, a chart titled 'Previous Years Placement Statistics' displays the number of recruits for various courses from 2016 to 2020. The chart shows a general upward trend in recruitment numbers over the five-year period. On the right, there is a section titled 'Apply for Job' with two bullet points: 'Search and apply for jobs' and 'Attend tests to get selected.' Below this is a 'Placement' box containing the message 'Congrats, You are Selected by Xilligence'.

PPMS Campus Placement Prediction & Management System

version 2.0.0

Search

Previous Years Placement Statistics

MCA MTech BTech CE BTech CSE BTech ECE BTech EEE BTech ME

Number of Recruits

Year

Year	MCA	MTech	BTech CE	BTech CSE	BTech ECE	BTech EEE	BTech ME
2016	52	43	28	20	15	10	8
2017	46	29	18	15	12	8	6
2018	62	37	22	20	18	12	10
2019	53	25	17	15	12	8	6
2020	75	49	22	20	18	12	10

Apply for Job

- > Search and apply for jobs
- > Attend tests to get selected.

Placement

Congrats, You are Selected by Xilligence

Screenshot

The screenshot shows a web-based application interface for a Placement Prediction & Management System. The top navigation bar includes links for Dashboard, Add Company, Add Department, Add Course, Schedule, Add Coordinator, Dump Data, and Logout. The main content area features several functional buttons: Home (Main Home), Statistics (Visualize), Gallery (Pictures), Team (Coordinators), Contact (Help), and Logout (Exit). Below these are four main action buttons: Dump Data (Delete Data each year), Select Coordinators (Select Coordinators from students), Schedule Event (Approve Schedule), and Add Department (Add new Department). Additionally, there are two large buttons for adding new entities: Add Course and Add Company. On the right side, a sidebar titled 'Messages' displays a conversation between users 'Rahul' and 'Anisha' with their respective messages and timestamps. The bottom of the screen shows a taskbar with various icons and system status indicators.

Placement Presentation - Online Lal | Untitled - Figma

localhost:3000/admin/dashboard

virtualappstore@gmail.com

Placement Prediction & Management System

Dashboard Add Company Add Department Add Course Schedule Add Coordinator Dump Data Logout

Home Main Home Statistics Visualize Gallery Pictures Team Coordinators Contact Help Logout Exit

Dump Data Delete Data each year

Select Coordinators Select Coordinators from students

Schedule Event Approve Schedule

Add Department Add new Department

Machine Learning Train ML Model

Add Course

Add Company

Messages

Rahul
How do we know if a company posts a job ?
19mp1395@rit.ac.in
11/30/2020

Anisha
Nice site.
19mp1300@rit.ac.in
11/30/2020

About Us Group - 12

Conclusion

- Solved almost all problems faced by Coordinators and students.
- Automated most of the tasks.
- Integrate more features to our application like video calls in future.



