

## **TOPIC : Centralized Data Repository for Placement Data Integration**

### **Abstract :**

The objective of this project revolves around collecting data from students and storing it in centralized data repository so that the data can be used for minimizing the efforts required on both ends; be it professor or student to make forms, receive data or to fill redundant information time and again. The prime focus of the project is to cater to the problem of redundancy in time and data required throughout the timeline of a student's placement journey. The project aids and automates the process of creating smart forms that will help collect student data, channelize it to placement department and thus help safe and smooth information exchange between students, faculties and companies.

### **Literature Survey :**

Sr no	Name of Paper	Conclusion
1	<b>The Impact of Object-Relational Mapping Frameworks on Relational Query Performance . October 2018</b>	we studied that ORM tools are widespread in today's application development environments and they are here to stay. In this paper, we have shown some of the consequences that such tools may have on query execution plan construction and query performance. Mitigations for these anti-patterns exist and tuning the ORM and database is also important.
2	<b>Comparison between client-side and server-side rendering in the web development. June 2020</b>	In this research we know that client side rendering and server side rendering have plus minus each other. In server side rendering was proven that Search Engine Optimization was better than Client Side Rendering because SEO read content from server's response as page not bundle.

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3	<b>Hybrid Database System of MySQL and MongoDB in Web Application Development.</b> <b>September 2018</b>	From the experimental results and analysis, we can conclude that the hybrid database model of MySQL and MongoDB improves the web application performance on large database size.
4	<b>An Analysis of Public REST Web Service APIs.</b> <b>July 2021</b>	The knowledge brought in by this work, namely understanding the state of the practice, can provide useful research directions for the academy (e.g., understanding how REST development tools affect compliance with principles or best practices) and useful guidelines for practitioners (e.g., commonly used user authentication mechanisms). As future work, we intend to focus on the challenges identified in Section 5, starting with the empirical analysis of REST development tools.
5	<b>Principles of securing RESTful API web services developed with python frameworks.</b> <b>March-2020</b>	Thus, APIs have become a key element in the development of modern web and mobile applications. They allow to organize interactions with applications, services, and software platforms. Thanks to their versatility and ease of use, REST architectural style interfaces account for about 80% of all public and proprietary APIs.

### **Problem Definition :**

Redundancy in time and space are the two things that we repeatedly face while we fill our data in placement data sheets . This process is tedious as well as time and energy consuming on both student and teacher side. Centralized data repository can be used to store, manage and provide data as and when required to the placement related authorities of Bharati Vidyapeeth College in matter of a click thus reducing the chances of error and providing automation in the tedious process of sheet making, data handling and information exchange between teachers, students and companies.

### **Proposed Methodology :**

- Client side

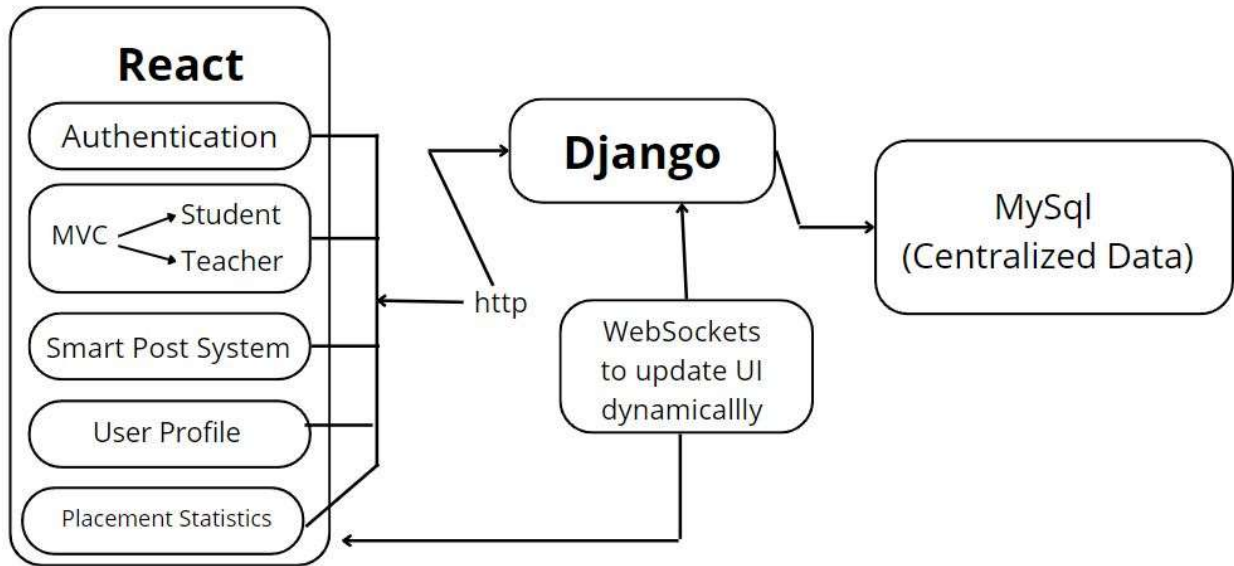
User can authenticate and can perform activities which will be assigned by admin.

- Server side

Server side data integration is going to recollect the all information entered by user

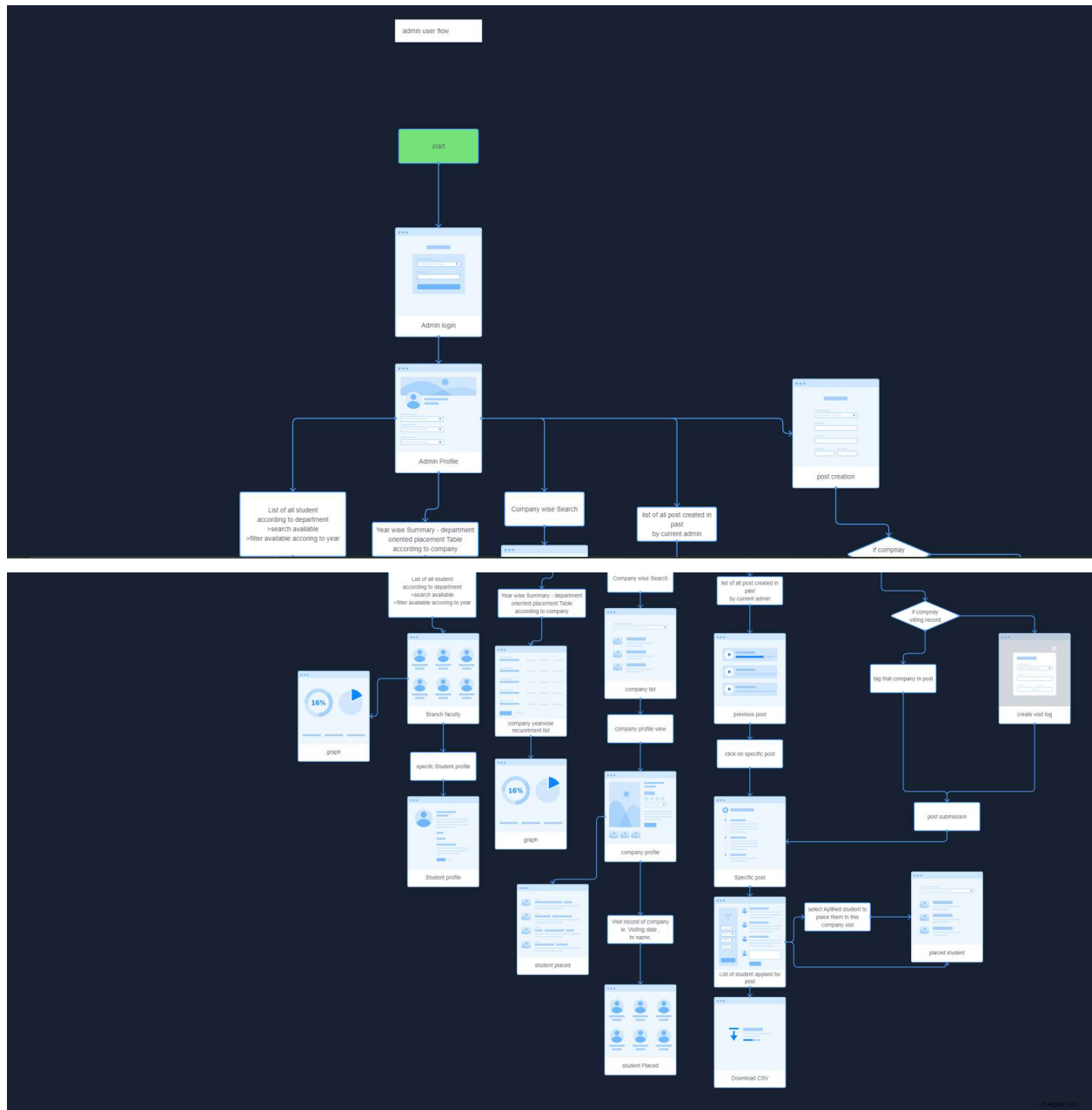
- Central Data Repository

This Interface can combine the admin and user platforms to designated work.





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## Conclusion :

Thus we have a vision to accomplish creation of a campus friendly application that caters to the needs and requirements of students, teachers, companies and placement cell of college in general. Data being the real gold of the hour can be stored ,structured, utilized and can be used to create applications that not only cater basic needs but target to specific areas of interest.

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Using data of teachers, students and every single person associated with placements in college, the project aims to reduce redundancy of data & primarily add authentication and robustness to the process of data collection, storage, optimization and visualization in statistical format. Centralized data repository is technically the solution to major problem of redundancy that lie around us using strategic ways to handle it.

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