

# CS480 – Course project

Summer 2020

Database: **Employee Hiring Portal**

## **Description:**

The idea is to make a portal/website which can you be used to hire employees/workers for the all the daily household/industrial needs. Daily needs include working at you home like gardening, plumbing, small-scale electricity works/repairs, wood work, et al. Industrial needs would include works at industrial scale or factory needs like ;arge scale ectricity works, IT-support team, workers capable of working with different sorts of machines, etc. The point of the portal/website is to provide daily needs only for a small period of time (for eg. a few days or maybe a few weeks) and NOT FOREVER. All the workers/employees are owned by the portal/website and are not freelancers. After completing their job for which they are hired for, the workers/employees return back, ready to work for a new job.

The design will consist of 3 entities in total portal manager that take cares of all the account related queries and troubleshoot the issues clients and workers are having then we have Client entity which consist of salary range, workload and type of work. Same thing goes for workers table will consist of all the things that a person look before giving someone a job. Basically we will be filtering results according to the needs of our Clients. And if any client wants to contact with any worker we will send them their information via email that way we won't be disclosing anyone's personal information.

## **Project Part 2 – CRUD (Create, read, update, and delete)**

Deadline: July 18, 2020

**List of entities:**

1. Clients
2. Portal\_manager
3. Workers

Based on the Demo (Part 1), implement the following functionality using Java and SQL with necessary GUI interfaces.

1. Insert/delete/update/read a **Clients**(all attributes except the Client id). The ClientID should be generated by the system automatically using MySQL autoincrement.
2. Insert/delete/update/read a **Workers** (all attributes except the WorkerID). The WorkerID should be generated by the system automatically using MySQL autoincrement.
3. Insert/delete/update/read a **Portal\_Manager** (all attributes)

## Project Part 3 – Queries

Deadline: August 1, 2020

Based on the Demo, implement the following functionality using Java and SQL with necessary GUI interfaces.

### Trivial Queries:

1. Select all the workers with a worker type 'chef'.
2. Display the names, worker types and salary of all the workers in descending order.

3. Select the names, worker types and salary range of all the clients who require a worker type 'electrician'.

**Non-trivial Queries:**

1. Select the name of the client, salary afforded by the client, salary paid to the worker, skill type of the worker where the client hired a worker with a skill type of programmer and paid \$2000 or above.
2. Select the name of the client, name of the worker and age of the worker where the client hired the youngest worker.
3. Select the name of each client, client email and the total the amount of money they spent in terms of salary.
4. Select the name and email of the client that hired the most number of workers.
5. Find the names and salaries of all the hired workers.