



Part III. GUI Design and Implementation, Schema Refinement, and Report

In this part, you can work with a pair.

Steps:

- a. Run the attached SQL scripts to import a correct implementation of the database.
- b. Design a graphical user interface that will connect to the database remotely to provide the services to an end-user described in Project.Part#2, explained below. The quality of your design will also be evaluated.
- c. Implement your design.
- d. Write a brief report that explains the following:
 - a. How is the GUI used? Add some sample screenshots to the report.
 - b. Is the relational schema of your database in 2NF/3NF/BCNF?
 - c. How would you improve this database?
- e. Demonstrate your work to your lab TA.

Services:

Basically, there are 3 actors: company, end-user, hrr (some hrr also end user).

- Develop registration page that allows any actor to register, to run corresponding insert queries
- Develop login page, no need to have separate login pages for each actor. For successful logins, redirect to actor's home page.

Company page, after login:

- Display the first name and last name of the HRRs that posted a job listing for the company (Part#2.Q5)
- Display company's job postings, along with the number of applicants
- Display applications to each posting (Part#2.Q6) if any,
- For either end-user applied to postings,
 - Display unemployed end-users (Part#2.Q1, requires slight modification)
 - Display the one that has been working at the same company for the longest period (Part#2.Q4, requires slight modification)
 - Display the number of applications of each (Part#2.Q7, requires slight modification)
 - Display the one with maximum experience (Part#2.Q8, requires slight modification)
- Display internship postings, if any.
- For each internship posting, display the applications, and their details

End-user page, after login:

- List all job postings, internship postings separately.

"First, solve the problem. Then write the code." John Johnson



- List open job postings, open internship postings separately
- Display the company with highest paying job's posting. (Part#2.Q3)
- Display some appropriate search environment to run queries 11, 12 and 13 of Part#2.

HRR Page, after login:

- Able to create job postings (insert job_posting query)
- Display his/her postings

NOTE: Projects that were not demonstrated will fail!!! If you miss the lab session during the demo weeks for some reason, it is your responsibility to arrange another time with your TA and demonstrate your work. Be prepared to answer questions regarding implementation details.

Deliverables: Project report and project source code (do not forget to comment your code).