

# Labour Hire Project

## Business Story

We're looking for great people to help deliver major projects for our customer. We are recruiting man power as we are the Human Resource department. We would like to use our notebook to search for a skilled person for a position in everywhere we want to complete it. We would like to search by giving skills and restrict the partial or fulfillment is required. It means all skills are required or at least one. We have employees and outsider contacts for persons persisted in our site specific store. Mainly we use **csv** files now.

## Software Analysis

The company has a central HR department and some local sites in other offices where some local data is stored and maintained as a csv data. We have to slice the software architecture to a 3 tiered application. First we have to implement a socket server to handle the locally stored data. It will be deployed to the sites. We have to serve a http service to browser clients that is able to communicate with socket servers. The browser clients can search everywhere and with socket server we can communicate in the LAN only therefore it is highly secured.

## Requirements

All the design structure is given as UML diagrams.

### RQ01

Implement an Employee class to store worker data. The Employee class is extending the Person class. The person contains the SkillSet list with Skills.

### RQ02

Implements the PersonStore Socket server to serve the data to http server. This class sends a list of Persons to socket clients. It maintain to change the csv source in the future. We should read the data through an abstract type named DataReader and we use currently the CSVDataReader Implementation. Handles the request for searching by allowing for skillset as mandatory list or optional list.

### RQ03

Implement CSVDataReader class to scan the file given by us. We store persons with a skill in a line. If the person has more than one skill we have more representation with same person in the file. Keep in mind if the person has salary in the file in that case it is Employee. This class reads the file for skilled persons and retrieves Person list. We have to store and retrieve the salary as well.

## RQ04

### SocketClient

Implement a socket client class for retrieving good persons. They request person list with string parameters separated with “;”. It means the skillset. Other param we should have to control the searching whether all the skills are mandatory.

## RQ05

SearchServlet. Add a skillserver HTTP Servlet to serve the list of good persons.

## RQ06

Cache for request. Stores the skill requests as a cache in the Session to avoid the unnecessary circles. If a skillset is in the cache we do not have to connect to socketserver.

## RQ07

Request form for searching. We have to ensure a site to accomplish the searching. We have to configure optional/mandatory skillsearching and the skills. The persons will be showed sorted by maximum of skillrate in case of optional skillsearching anyway the basis of sorting should be the average of the persons' skillrates.