**Web Programming Project, Spring 2017**

## 1-General Instructions:

➔ The project should follow MVC architecture.

➔ You are allowed to use any programming language (Java, PHP, ASP, Ruby, Python ..) or

framework (Spring MVC, CakePHP, Ruby on Rails ..) for this project.

➔ You are not allowed to use any template for this project.

➔ Make sure that your website is not prone to any of the hacking techniques that will

be discussed in the course.

➔ All the form fields should be validated on client and server side.

➔ A good website design will carry extra marks. however, gold plating beyond a certain

limit won’t be considered for marking.

➔ Keep the design as simple yet as professional as you can.

## 2-About the deliverables

➔ No requirements from a previous deliverable will be marked in the next ones.

➔ Evaluation date is the actually due date.

|  |  |  |
| --- | --- | --- |
| **No** | **Evaluation Date** | **Tasks** |
| 1 | 6 Feb 2017 | Deliverable 1 |
| 2 | 20 March 2017 | Deliverable 2 |
| 3 | 17April 2017 | Deliverable 3 |

## 3- Human Resource Management System Requirement:

Human resource management system deals with all issues concerning employees in an organization. In this project, the requirement is to create an online system for the HR to manage the recruiting process. Following roles should be implemented:

1-HR Manager

2-HR Personnel

3-Applicant

4-SME (Subject Matter Expert)

Following are the steps of work flow required:

1. HR personnel advertises the job on the company web site.
2. Applicants submit CV\resumes on the web site.
3. HR personnel receive and review the applications.
4. HR personnel send call for interview or rejection letter to the applicants.
5. Emails are sent to SME to request them to come to interview the applicant.
6. When SME confirm times for interviews then emails are sent to applicants to come for interview on the given date time.
7. After the interviews the SME give ratings of the applicant which the HR personnel can see.
8. After getting the feedback from the SME top five candidates resume are sent to the HR Manager.
9. Emails for interviews are again sent by the system which the HR Manager can set. The HR manager conducts the second round of interviews and gives feed back in the HR system feedback forms.
10. Letter of offer is sent to the selected (best candidate after HR Manager interview). Rejection letters are sent to the rest of the applicants.

## Deliverable #1

### Website layout and design

* Basic website layout and design (including forms) using HTML, JS and CSS.
* This includes design of all the pages required for the application.
* Each role should have its own views\profile pages and actions they can perform.
* In this deliverable only the view is required. The backend coding is required in deliverable 2.

## Deliverable #2

### Back end programming

* All the Functionality should be working for the HR recruiting system as defined the in section 3.
* All back end coding, model, and dependencies should be working.
* Client side and server side validation should be implemented.
* Security features should be implemented. (This includes Roles, XSS, and SQL injection)

## Deliverable #3

### Web Service

* Design a web service which can be used to:
  + Get applicant details searching by name this service should also give Application id.
  + Get application status by searching on Application id.
  + The data should be returned in either JSON or XML.
* Implement at least one user interface component using AJAX.