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**ADA UNIVERSITY**

**SCHOOL OF IT & ENGINEERING**

Course: Object-Oriented Analysis & Design

# HOMEWORK ASSIGNMENT

Project title: ***“Human Resources Management Systems”***

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# Introduction

This document briefly specifies the functional and nonfunctional software requirements which also contains core and optional requirements, implementation of use-case, class and sequence diagrams for the Human Resources Management Systems.

The definition of human resources management is used to describe the companies and the employees who work in those companies by being responsible with the management of resources for employees such as involving hiring, firing, developing with trainings and etc. Most of the time the company’s HR department is responsible for hiring employees, helping them to develop and maintain the system and governing the employees of the company. For fulfilling all the requirements to develop the company by checking every employee in the system and tasks that are given to the employees HR department uses the system or software Human Resource Management Systems.

The aim of this document/homework is to create the software requirements and diagrams for our system in order to give brief information about the software itself. In upcoming documents, we will be able to develop and maintain our system more by checking the software requirements.

# Software Requirements

# Functional Requirements

Before specifying all the requirements, first we have to explain what exactly are functional requirements and the importance of them in the development of system. Functional requirements are the requirements that define all the functions that the system should do and accomplish with specifying the behaviors of inputs and outputs of system and how they are affected. Functional requirements are the fundamental concept when someone develops the system because all the requirements should be gathered from stakeholder’s (also called costumers) requests in a sense of what kind of system they desire. Developers use the requirements in order to make the system regarding to the specific request that have been made by stakeholders and develop use-case, class and sequence diagrams by the help of gathered requirements.

During the JAD session, we have created several functional and nonfunctional requirements for our system. Here’s the list of functional requirements which we will develop for our project:

1. The employees should be able to register to the system by specifying the required information.

Which means for the specific information that the user entered to the database, he or she should be able to register to the system. The system will require all the important information such as name, identification number, birth date and etc. while registering to the system.

1. The employees should be able to login to the system by specifying the information that they specified in the first section.

After registering to the system, user should be able to add the data that he or she had provided while registering and login to the system. Every user should be able to see different views for the main page when they logged in.

1. The employees should able to modify the data they entered beforehand.

There should be the section for editing the information for every user in the database. For instance, if user has changed the phone number or the address, he or she should be able to change the data in the database.

1. The system should be able to add the employees to the system and database.

For the system it is important to have the functionality of adding the employees to the database. For instance, if the employee has started the job in the company, the system should check all the details and add that user into the system.

1. The system should be able to check all the employees that has been added to database.

The system should have the functionality of checking and viewing all the registered users in the database. The system should be able to change and modify the data in the system if HR wants.

1. The system should be able to search for registered employees.

Registered users (especially HR) should have the functionality of searching for something in the database. For instance, let say HR wants to search for specific user for getting any kinds of information, he/she should be able to find that information.

1. The system should be able to identify the privileges of the registered users.

The system should have the functionality of viewing all the detailed information about the privileges of the users in the database. This may be for what purpose the user registered into the system which can be employees, admin and others.

1. The system should be able to manage work tasks, requests and delegation.

The system should have the functionality of viewing and editing the tasks that should be done till the specific date.

1. The system should be able to manage vacancies and recruitment.

If there will be any types of new vacancies in the database, the system should have the functionality of adding, editing that data in the database.

1. The system should have the functionality which will give an opportunity to assign a task to the users by the authorized users such as HR department.

The system should check the privileges for all users which will help the HR system to assign any task for the employees in the company.

1. The system shall be able to change the progress of the tasks in the profiles of the users.

The system should have the functionality of viewing the progress for the given tasks to the users. For instance, let say the user has been given to complete one project and he/she should be able to change the progress of any task and the system should be able to view this change.

1. The system should have the functionality of getting reports from the employees about the tasks they have or completed.

For every user there should be the section for the completing given tasks which will help the user to print out the report for that given task.

1. The system should have the functionality of promoting the employees in the company.

If the user (in other words employee) does well in the company in a sense of finishing all the given tasks perfectly, the system should have the functionality of promoting that user with several rewards.

1. The system should be able to have user’s card information in order to give the salary.

As we have mentioned in the previous requirements, the user should fill the required information while registering to the system and adding the card information in order to get the salary within the card system.

# Nonfunctional Requirements

1. The number of online employees of the HRMS can be estimated as 50 at most.
2. There should not be any restriction on the number of users to be added to the database.
3. The system should have a user-friendly homepage which means all links should be able to find in three clicks.
4. The system should be able to have the function of audio call for conferences.
5. The system may have the function of video call for conferences.
6. The system should also automatically generate documents which facilitate related human resources management activities.
7. The system should be able to monitor the status of issued problems for the company.
8. The system should be able to determine and apply the appropriate pay scale for employee.
9. The system may have the option of updating personal information about the employee.
10. The system should be able to generate the report for one year of work.
11. The system should be able to provide capability to identify the transactions from other systems.