**CCT College Dublin**

**Assessment Cover Page**

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| **Module Title:** | Algorithms &Constucts |
| **Assessment Title:** | Integrated/ individual |
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**Declaration**

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| By submitting this assessment, I confirm that I have read the CCT policy on Academic Misconduct and understand the implications of submitting work that is not my own or does not appropriately reference material taken from a third party or other source. I declare it to be my own work and that all material from third parties has been appropriately referenced. I further confirm that this work has not previously been submitted for assessment by myself or someone else in CCT College Dublin or any other higher education institution. |

Report

CA\_2 Java Human Resources System Project

We have choices that (tech, hospital, police). I choose tech company. This one is based Java application. The software system simulates the human resources operations of that company.

Main goal of this project is managing, storing, sorting, searching and adding employee information. During this Java-based Tech company HR system project, Object-oriented programming (OOP) principles, data structure concepts and enums, algorithms was used that project.

That Java-based Tech company HR system project manages each data using classes. There are Employee, JobPosition, DepartmentType, MenuOption, CA\_2 (MainMenu) and of course text file. Empolyee information includes data such as firstname, lastname, gender, email, salary, department, position, company and includes system for the user to enter those data in a complete and correct from.

* Object-oriented Design (Classes- Employee,CA\_2(MainMenu), JobPosition, DepartmentType)
* Enum usage for structured
* Algorithms for sorting and searching
* Data validation for input
* Text file store

System View

* Add Employee(  First name,Last name,Gender,Email,Salary,Department,Position,Job title,Company)
* Data Validation ( correct email format,)
* Sorting and searching (Uses methods to organize employee data )
* Storage (Writes employee data into a structured text file )

This Java-based Tech company HR system application has asorting and searching function for employee information. The Applicants\_Form.txt file also has a function to store and read datas using a text file writing and reading.

The main interface of the programm is centered on CA\_2 (MainMenu) class, and user can select from the menu and control each function command line.

Otherwise, this Java-based Tech company HR system project has become well-structured of small-scale human resource system that uses basic programming concepts and simulates real world applications. This Java-based Tech company HR system project is programming exercise that is important skills such as data management, processing user input and sorting and searching data.