***Project Abstract towards completion of MSIT COMP898 Requirement***

***The salary management Web Application***

The salary management web application is which shows the activity between the salary, working hours, payments, employees. Using our payroll module allows you to keep track of pay and other details. In addition to the history of when a salary change occurred, you can now store the reason behind that change as well as keep track of new job assignments and job descriptions. It simplify the process of record maintenance of employees information and their pay-slips in an organization. On the other end, The application can be software for the small business to track the data of the employees, where admins can do CRUD operation on the employee information.

**Project Topic:**

Employees are considered the most important resource of the organization. Thus companies spend copious amounts of time recruiting, training and maintaining sufficient employment for their business operations. One of the most essential tasks thus is processing their payroll. Employees need to be able to rely on being paid on a consistent basis without delays. Irrespective of the size of the organization, payroll plays a huge role in maintaining the morale of employees to the financial stability of the company. This project proposed dynamic solutions to combat the payroll and other employee-related issues. The proposed application will companies to perform tasks such as calculating staff members salaries and deductions, generating pay stubs and tax forms. The **application** helps to minimize manual errors and cycle times. This project deals with employee information and monthly pay-slip.

1. ***What is the problem will this project solve and why it is important?***

It obviously takes extra time and extra resources for a business to manage its own payroll but as far as in employee management is concerned, salary management software helps to speed every aspect of the payroll process with a range of automated features.   
It is easy to make mistakes when you manage aspects of salary depositing manually, but with the above solution it becomes much more difficult to make such mistakes.

1. ***What will this project accomplish?***

The project will produce interactive application for employees in the smallscale business industry to know relative information.

* The project will sync and consolidates employee data and regulatory rules and automates calculations, leaving no room for oversight.
* Paycheck mistakes not only waste our time, they build distrust and can harm employee morale.
* Employee can view his/her information and paychecks of previous and current months.
* The admin can do CRUD operations on the employee information. (Example – add a employee, update or delete the salary information, Designation, Department)
* Deploying the above web application to the server by use of Elastic bean stalk.

1. ***Approach research and development process including tools, data sets, architectural approaches or methods used to do the project:***
2. How the payroll play vital role, how the salary structure is defined like Basic pay, HRA(Health Reimbursement Arrangement), Travelling, Allowances, Provident Fund, Taxes etc.
3. How to design the template for pay-slip.
4. The deploying the web application by the use of amazon elastic beanstalk which automatically holds the deployment, acts as load balancer, auto-scaling to health monitoring.

**As MS in IT student, following are computing techniques will be used in this project:**

1. Amazon Elastic Beanstalk where it automatically handles the deployment details of capacity provisioning, load balancing, auto-scaling, and application health monitoring.
2. Django web framework is used to develop the web application. Django is a collection of Python libs allowing you to quickly and efficiently create a quality Web application, and is suitable for both frontend and backend.
3. HTML, CSS3 is used to develop the front-end of the application.
4. RESTful API’s are used to interact with the source code.
5. Practice developing software engineering application following best practices starting by requirements analysis, design modeling, code implementation, testing and verifications, deployment and maintenance.
6. Build secure application that is reliable, scalable, and maintainable. For example, applying application security principles like user authentications, and ensure confidentiality, data integrity, and application availability (Full stack application security).
7. Follow standard software application documentation before and during the project development.