BSc (Hons) Software Engineering

Cohort: BSE19BFT

Assignment 1 for 2020-2021/Semester 1

MODULE: ENTERPRISE SOFTWARE DEVELOPMENT

MODULE CODE: SDT3104C

TOTAL MARKS: 100

WEIGHTAGE: 70%

SUBMISSION: WEEK 15

Introduction

Ken Grill Mauritius is local chain of restaurants specialized in serving chicken meals. The company partially imports and partially manufactures its product range. While Ken Grill aims to supply its services as the basis for helping its customers grow their business, Ken Grill was held back in achieving its own growth aims by inconsistent, inaccurate, and delayed information. The result was persistent difficulty in forecasting and making important capital expenditure decisions to achieve a return on investment. Challenges currently faced by Ken Grill are: -

- Paper-based, manual invoicing and workflow processes led to business process delays.
- Difficulty in forecasting due to lack of data and information control.
- Inaccurate stock management.

The executive manager of operations has reached out to you to implement Dolibarr ERP/CRM for Ken Grill to: -

1. Manage stock.
2. Manage staff.
3. Manage customers.
4. Provide POS for its outlets. (The company has 5 outlets and would want a dedicated staff for the POS at each outlets).
5. Provide a dashboard for viewing status of stock, enable forecasting.
6. Provide a bank management module.

Ken Grill currently employs 15 staffs, which consist of 1 director, 2 managers and the remaining staffs works at the different outlets. Ken Grill plan to hire 3 more managers and an additional of 20 staff to work at the outlets.

Task 1 – 25 Marks

Discovery, Planning and Design

In the Discovery and Planning phase, you should gather input about different business group's requirements and the issues that the software needs to solve. An important part of this phase is constructing the project plan, which will serve as a guide throughout the rest of the project. In the Design phase, you will be working out the various configurations for the new system, defining roles, and documenting standard procedures

Task 2 – 40 Marks

Development

In this phase, you are required to set up/configure Dolibarr ERP/CRM to meets below requirements: -

1. Manage stock.
    a. Manage Ken Grill Warehouse.
    b. Allocate stocks.
    c. Automatic/Manual stock updates.
    d. Replenishment and Inventories.
    e. Manage deliveries.
    f. Report generation.
2. Manage staff.
    a. Employee/Human Resource management.
    b. Manage time sheet
    c. Manage Vacancies at Ken Grill
3. Manage customers and Bank Management
    a. Manage prospects/customers.
4. Provide five POS for its outlets.
5. Provide a dashboard for viewing current status of stock, enable forecasting.

Task 3 – 15 Marks

Testing

ERP testing is a quality assurance (QA) process designed to ensure the ERP system is correctly implemented and operational before the full launch. Test the implemented ERP/CRM using Internet Explorer, Firefox and Chrome and make sure that all required features are fully functional.

Write a short report describing your testing. Provide a description of any outstanding problems and recommendations for fixing them. The written part of your report should not exceed 500 words.

Task 4 – 20 Marks

Critical Evaluation

You are required to write a short report (1000 words) analyzing the ERP/CRM you have implemented. You should highlight the strong and weak aspects of the ERP/CRM, suggest improvements, and propose ideas for further development. This analysis must also include a discussion of the security aspects, scalability, comparison with other ERP/CRM providers and learn what questions you should be asking when determining whether to delegate this responsibility to a third party.

Guidance

Consult with your lecturer if you are uncertain about any aspects of the assignment. The ERP/CRM must be implemented using Dolibarr, no other ERP/CRM should be used. The purpose of this assignment is to effectively analyze a Business Case, propose the best solution and configure an ERP/CRM effectively to implement the proposed solution

Submission Requirements: -

1. A *pdf version* of your assignment report and a soft copy of the *website*.
2. Ensure that all the *installation steps* required to run your site is **documented** in the report.
3. Please ensure that you include *your full name* and *index number* on the cover page of your report.

4. Students should follow the protocol for submission of coursework's, that is they should clearly mention theirs
   - Surname and Name
   - Cohort and correct Student ID (very Important)
   - Name of the Module and specify whether Resit or Normal
   - Name of the Lecturer.

5. Students should submit their coursework's (both Normal and Resits) to Lecturers concerned and copy to the SITE Exams Unit on siteexams@umail.utm.ac.mu.

Warning: All media must be virus free!

Media containing viruses, or media which cannot be run directly, will result in a **FAIL** grade being awarded for this assignment.