

Student should read carefully the following situation:

MaMaSpa is one of the most well-known spas for messaging therapies and spa treatments. There are currently three branches in Vietnam's south. Every branch manage one's information basing on Microsoft Excel. Employees and managers at the branch use the same data file for booking management, appointment management, product management and reporting.

MaMaSpa's CEO wants to modernize the information system to make management and sales easier. You are require developing Web application for manager, employees and customers.

Some features shall be added to support customer such as online booking management, membership management, gift certificate, credit-card processing, SMS and text reminders and transaction management. For manager, the dashboard provides a view of upcoming appointments, statistics, daily transactions and revenue. Other features include credit-card processing, photo management, weekly scheduling, reception mode, a dashboard, SMS and text reminders and transaction management. The scheduling module provides a calendar view, an appointment wizard, staff management, overbooking management and color coding. The payment tracking feature records items sold, discounts and tax rates.

For employee, some features are pre-defined by the employees of MaMaSpa:

1. View their shift by month, by week, by day.
2. Request change their shift in case of they have an emergency business.
3. View list of services and customers by shift.
4. Receive notification regarding services/customers that they had served.
5. Update customer's information concerning their shift, including payment, gift-card, voucher and so on..
6. View their income, commision by month, by year.

The Web application should compatible with a wide range of browsers such as Sarafi, Firefox, Chrome, CocCoc,...The language is used for Web application including Vietnamese, French, English.

As a software development professional, you will run into all kind of projects and situations within those projects. The IT support of MaMaSpa could assist you in elicitate some missing requirements in the early stage. Please answer below questions:

1. What software development methodology would you suggest for this situation and why? (3 points)
 - identifying the characteristics of this situation and specify the logic behind the selection of characteristics
 - Select a model that best fits the characteristics you identified above.
2. List out 4 functional requirements of employees' role and 2 non-functional requirements of system. (1.5 points)
3. Write 2 user stories of employees' role. (1 point)
4. For the dashboard of employee in Web app, create a story map to show the user experience and what you need to build. Feel free to add fictitious functionality and features as you feel appropriate. You will be graded on the quality, completeness, and correctness of your story map.(2 points).
5. Despite the software development methodology you have chosen, your manager requires you to choose Waterfall Software Development to apply this project.

- a. Should you agree with this require or not ? If NO, please give the appropriate explanation for WHY question. If YES, give your propose ideas to require end users and other team that could assist you choosing Waterfall model to develop this application. (1.5 points)
- b. What kind of testing would you suggest the team to do? (1 point)