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. MaMaSpa's CEO wants to modernize the information system to make management and sales easier. Every branch had developed a desktop application to manage one's information. Employees and managers at the branch use the primary features including booking management, appointment management, product management and reporting.

These systems shall be merged sinto one Web application. In addition, new 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. The Web application should compatible with a wide range of browsers such as Sarafi, Firefox,

Chrome, CocCoc,...The used language for Web application is Vietnamese. The new added features

are compatible with iOS, Android mobile devices. It is available in multiple languages including

English, French, Vietnamese.

Using the new mobile app, MaMaSpa's customers can:

a. Download an app for iPhone, android phones.

b. Login in the app using their account or identify themselves using other authentication

methods.

c. View all of services of spat

d. Make an appointment: select services/ package-> select date and time >> select employees →> estimate amount > notify making an appointment successfully.

e. Payment: before coming to spa or finishing the service.

f. Receive notification before appointment happen.

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)

In this situation, the topic given is that I have to set up a management page for Mamaspa and make an online appointment for people, then first a web management includes front-end and back-and.

- back-end: this management web will include 3 rights including:

+ role Admin: management, appointment management, product management and reporting of staff.

+ role staff: will include some functions in the first update

l.View their shifts by month, by week, by day

2. Ask to change their shifts in case they have urgent business.

4. Get notified about the services/customers they have served.

5.Update customer information regarding their shift, including payment, gift card, voucher

and such..

6.View their income, committed by month, by year.

+ role user: are the users who will only be able to use the services and vouchers displayed on the front-end of the user interface.

2. List out 4 functional requirements of customers' role and 2 non-functional requirements of system. (1.5 points)

4 requirements on the employee's role function:

- Update customer information to receive notifications about the services / customers they have served (follow up and hundreds of customers)

- gift certificates, credit card processing, SMS and text message reminders, and transaction management

- keep track of payments, gift cards, vouchers and ... to upload to users

- record sold items, discounts and tax rates.

2 non-functional requirements:

- Web applications must be compatible with many types of browsers such as Sarafi, FirefoxChrome, languages used for Web applications include Vietnamese, French, and English.

- Manage overbooking and color coding.

3. Write 2 user stories of customer'role. (1 point)

\*Cấu trúc trả lời câu hỏi:As a <type of user>, I want <some goal> so that <some reason>

- An employee in MamaSpa that day was assigned to work the shift from 16:10-17:40, but when they went to work, they arrived at 12:50-14:20 and argued with the staff of that shift. but when opening MamaSpa's management page to check the calendar, the employee remembered wrongly and realized his mistake (the function of Viewing shifts by month, by week, by day has been completed)

- a new employee who has only been working for a month came to receive salary and did not accept the salary offered by the manager. but when opening the management web of MamaSpa, in the function View income, commitment by month, by year. then they remembered the salary in the pledge and accepted the apology

4. For the mobile 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).

**\*Vẽ Story map**

5.Despite the software development methodology you have chosen, your manager requires you to choose Agile 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 Agile to develop this application. (1.5 points).

b. What kind of testing would you suggest the team to do? (1 point)