

# Criterion A: Planning

## The Scenario

The client, **XXX**, owner of a Beauty Salon, requested me for a software which would generate an invoice and interval reports specifically in a PDF format<sup>1</sup>.

Invoice should have the following information:

- Branch information
- Client information
- Date it was generated
- Serial number for the invoice
- Products and Services bought by the Customer

Following reports should be generated between 2 dates:

- Number of Clients between
- Amount of Sales
- Most to Least demanded products
- Most to Least demanded services

Prior to this request, **XXX** managers and owner struggled to analyse their performance and made invoices manually using their invoice book. Around 100's of invoices are generated every day. Keeping a record of each and every invoice generated is also very important, and using an invoice book requires the manager to make 2 copies of invoices, one for record and other for the customer. This takes up a lot of space and time. Instead, generating a pdf version of the invoice will not only save up storage space, it will also speed up the process of making invoices.<sup>2</sup>

To make this product, I needed to collect basic information such as product information, service information, customer information, layout of the invoice menu, layout of the generated invoice, and layout of reports. For this, I called the owner<sup>3</sup> and also had face-to-face interviews<sup>4</sup> where we discussed and decided the final design of the product.

## Rationale for the Solution

It is very important for the product to be user friendly so it is easy-to-use and no additional training is required. Also, this program will be offline, thus there'll be no issues if internet isn't working.

MySQL database will be used to store the client, branch, invoice, product, and services' information. The client agreed to use MySQL due to its advantages<sup>5</sup>:

- Protects sensitive information and ensures security of data with remarkable data protection features
- Free of cost

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<sup>1</sup> Refer to Appendix A.1

<sup>2</sup> Refer to Appendix A.1

<sup>3</sup> Refer to Appendix A.1

<sup>4</sup> Refer to Appendix A.2, A.3, and A.4

<sup>5</sup> Refer to Appendix A.1

Java will be used to develop this product. The IDE I've chosen is Eclipse, as it is easy to create GUIs by using the Windows Builder from Eclipse Marketplace. Reasons to use Java are:

- Platform Independent
- Object Oriented Programming Language - Developing an OOP application is much easier, helps keep system modular, flexible and extensible.

### **Success Criteria**

After discussing with the client, I came up with the following success criterion:<sup>6</sup>

The manager should successfully be able to:

- Add new branch, edit branch information, delete branch, view list of branches
- Add new client, edit existing client's information, view list of clients and client information.
- Add new product, delete product, edit product, view list of products available
- Add service, delete service, edit service, remove service, view list of services available
- Prepare and generate invoices, view invoices generated, and open invoices from the program.
- Generate reports between intervals, such as most demanded to least demanded products and services, and sales and number of client visits in that interval.

**Word Count: 479**

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<sup>6</sup> Refer to Appendix A.2