Feasibility Study

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Component App

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# Overview of the Project

The proposed Component App prototype will enable users to find and view the inventory for a computer store through a CLI (command line interface). The prototype will be developed in increments, with version 1.0 being the first increment and version 1.1 being the second. The functionalities of these are described as follows:

Component App Prototype version 1.0

* View Components (generated by hard-coded list of components)
* Select a component by SKU to view more information
* Navigate through a list of components
* Exit the system

Component App Prototype version 1.1

* Simulated User / Employee Login
* View Components (generated by hard-coded list of components)
* Select a component by SKU to view more information
* View component lists by category or sub category
* Navigate through a list of components
* Exit the system

# Economic Feasibility

The Component App is to be developed using the Java programming language. This will allow it to run on various platforms, and processor and memory requirements will be low. The client will be able to use their exiting PCs to run and use the application. There will be many benefits to the client upon completion of the prototype, including time savings as using the app will be much faster than their current existing inventory management system which is pen and paper.

As Java is an open source language and therefore free to use, the cost of development is significantly less than using a licenced programming language.

Since the proposed app is relatively simple and straightforward to use, minimum training will be required for the client and their employees to use the software.

It is clear that the project is feasible from an economic standpoint.

# Technical Feasibility

## Familiarity with Similar Applications

The project is similar to other projects completed to date which used command line interfaces to display menu options and perform record searches. Other projects have also been built which provided basic functionality to end users and then added extra features in later iterations.

## Familiarity with Technology

The proposed project will be built using the Eclipse IDE and Java programming language. Both of these are open source and free to use, and the developers have sufficient knowledge of both to complete this project.

The employees of “Tech Component LTD” have not used a system similar to this in the past, however they are very experienced with using PCs. A small amount of training should be sufficient for them to feel comfortable using the Component App.

## Project Size

This will be a relatively small project. Version 1.0 of the system only requires limited functionality. Version 1.1 will add extra functionality which can easily be added to version 1.0.

In summary, this project is technically feasible.

# Resource Feasibility

Resources required for development of the component App include:

* PC or laptop to run the IDE on and the finished software in order to test functionality.
* Programming tools i.e. Eclipse IDE
* Software developer

# Operational Feasibility

A small amount of training should be sufficient for the employees of Tech Component LTD to operate the software.

# Social and Legal Feasibility

The proposed system will be developed using open source tools and libraries and will abide by EU regulations and requirements.

# Considerations

## Performance

The Component App will be relatively small in size and the process it will perform will not be hardware intensive. The application will perform well on a standard PC.

## Security

Version 1.1 of the application will feature a login system which will provide the security required for the client’s needs.

## Usability

The versions of the application to be developed will have a command line interface and will only require a small amount of training to operate.

## Maintainability

The proposed application will be developed using best practices of object oriented programming and will implement the 3-tier model of software development. The system will be well structured and will be highly maintainable and will be able to scale if additional features want to be added at any point in the future.

# Conclusion

Based on all the information contained in the sections in this document – economic, technical, operational, social, and legal, the conclusion is that this project is very feasible.