IMPLEMENTATION OF A MOBILE PHONE INFORMATION SERVICE USING DIFFERENT DATA SOURCES

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Abstract

The importance of information access highlights the need for the development of mobile information services. Primarily two technologies, Short Message Services (SMS) and Wireless Application Protocol (WAP), are the most popular phone features being used by most people. Several studies show that WAP is a more efficient way of delivering information to people anytime and anywhere because it delivers information from a relational database, unlike that of SMS which gather information from a static HTML page.

Java Server Pages (JSP) is a technology that lets you mix regular, static HTML with dynamically-generated HTML. Many Web pages that are built by CGI programs are mostly static, with the dynamic part limited to a few small locations. But most CGI variations, including servlets, make you generate the entire page via your program, even though most of it is always the same. JSP lets you create the two parts separately.

JSP separates the processing and business logic codes from the presentation. Instead of embedding HTML in the codes, static HTML pages are placed in the JSP page, just as regular web page, and add a few JSP elements to generate the dynamic parts of the page.

In this paper, the proponents developed a mobile phone information service using Java servlets, JRun and JSP concepts.

CHAPTER 1

INTRODUCTION

1.1 Background of the Study

Nowadays, the world gives much value on information. People use it to make decisions and carry out certain processes. Because information is important to people, they need information wherever they go and whenever it may be. This need gave birth to technological advancements like the Internet and mobile networks. One of the most common devices used in mobile communication is the mobile phone.

One of the more famous features of some mobile phones is Wireless Application Protocol or commonly called WAP. It enables users to access the internet through their mobile phones. But the researchers have observed that most people use WAP to just browse through the internet without doing any transactions at all. What the researchers thought about is to develop an information system that would enable customers of a particular company to make transactions through their mobile phones anytime and anywhere they may be.

One thing the group took into consideration was that of the backend data source from which information are being queried from. The system should be able to query from any type data source. The group wanted to develop a mobile information system that would be independent from any backend source. This

means that the system would be able to work with almost any back-end data source type available.

1.2 Statement of the Problem

The general problem of this research study is "How to implement a mobile phone information service?"

Specifically, it seeks to answer the following questions:

- How can mobile phone query information from any data source?
- How can a computer query from a data source?
- How can a computer send requested information to mobile phones?
- How can the mobile phone information service interface be designed?
- What must be done to enable the mobile phone information service query from any data source?

1.3 Objective of the Study

The general objective of this research is to implement a mobile phone information service.

The specific objectives are:

- To develop a system that will enable the mobile phone to receive information from different data source
- To know how the computer send requested information to mobile phones
- To find a way to design the mobile phone information service interface
- To find a way to enable the system query from different data source through JDBC connections

1.4 Scope and Limitation of the Study

This study is focused on proving that mobile phones can query from any data source. In addition to this, as a proof of concept, the proponents of this study will be developing a simulation of three data sources. And also, this study is focused on proving that any data source can be used in querying using JDBC.

One limitation of the study was the use of static SQL commands. Telecommunications companies would not accept parameters passed on to their gateways. Since the study of the group was dependent on the use of the gateway no other means can be done to find other ways in passing parameters because the gateway itself is not accepting parameters. An explanation to this is that the technology is included in the specification of telecommunications companies but that technology is not yet available for use.

1.5 Significance of the Study

This study is significant to mobile phone users. They will be able to query from the data source wherever they may be and whenever it may be.

Since state-of-the-art technologies will be used, companies will be able to provide information services that are also state-of-the-art. It will also be beneficial for the company because the system that will be developed is independent from its data source. Whatever data source or whether they decide to change that data source they are using, the system would still work because of Java Database Connectivity.

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Because of inability to pass parameters due to mobile network connection problems, the group created a page with static SQL commands to take off passing of parameters to the gateway which is impossible to do.

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