

Weekly Report

Project Name	<i>Geo location based Service finder for User Needs (GSUN)</i>
Index No	<i>090587J</i>
Weekly Report No	<i>7</i>
Reporting period	<i>2302-2012 to 1-03-2012</i>
Section 1: Activities and Progress	
<i>1.1 Implementation progress</i> First week I focused on setting up initial requirements, obtain knowledge about current environment and lay the basic foundation to the server side database manipulation. According to the time line it's scheduled to obtain the initial background with in this week. But at the end of the week I was able to step ahead and construct the basic functionality of this project. In the second week I was able to step in to the main implementation phases. I decided to complete the server part as the first phase then move to the client phase. My idea is to finish the web application as soon as possible. For that this week I implemented the classes and their methods relating to database manipulation. So that the logic layer can directly call those classes and get the work done. In the third week I finished majority of the business logic layer of the web service and touch the network connectivity section. But can't fully complete as the client application has not developed yet. In the fourth week mainly focuses on the finishing part of the web service. In addition to that I started to build the web client which allows people to add details about places. Gather knowledge how to build PHP clients for java web services, communication between them and finding about Google map API. In the fifth week mainly completed tasks for the mid evaluation demonstration. In addition to that try to find a solution to connect PHP application to Java web services. In the sixth week I was able to develop the web service and host in localhost. Tested its working conditions. Found out a methods and related libraries to send complex objects to java web services through SOAP messages. In seventh week I was able to connect my Android application (GSUN client) to exchange data with the GSUN web service that has already developed. In addition to that I focused on creating Android user interfaces (basic layouts). I was able to configure the dialer and email client with my application.	
<i>1.2 Testing progress</i> Sample data testing is done on fourth week. Test for connectivity of databases and passing data through web service. Data manipulations through web service and database management layer were perfect. Test cases to test Android user authentication. Tested the GSUN server for request and responses using a plain test class. Tested GSUN server and GSUN client (Android app) for exchanging data.	

1.3 Deviations from proposed architecture and design

In database table formation I've used two databases. I separated the database use for authorization because it'll help to give more care on authorization and help to reduce traffic affecting on a single database through a single port.

Database layer components now do some additional tasks in order to the requests made by client.

Information from open users are entered into temporary database by passing the web service as PHP and java uses different serialization/deserialization methods.

Section 2: Risks, Issues and Challenges

Designing database part is a risky part, because a lot of things depend on it. Database layer mostly affect the efficiency, performance, maintainability of a system. So there is a potential risk that if this database layer design would harm the future development of the rest of the system.

In database manipulation layer the invalid inputs should be rejected. Otherwise SQL injection might expose the secured data to other parties.

Trying to make the logic layer loosely coupled from other layers and make the components of the logical layer more independent.

Currently having a risk about communicating java web service with PHP client. Most probably have to use Strings rather than serialized objects.

But there a problem with unserializing objects in PHP and Java. So may have to deal with string arrays.

Integrating path drawing component and voice recognition components, as some parts are not supporting and difficult in finding resources.

Section 3: Next Steps

Integrate Google map and make up user interfaces much nicer.