# SIDADIYA



Group 07

Submission Date: 17th March 2014

# 1. Group Details

**Group Number:** 07

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# 2. Project Title

#### **2.1.** Title

Project Title : Sidadiya

## 2.2. Project Type

**Software Implementation**: The proposed project will design and develop a software system for the lattermentioned problem definition.

## 2.3. About the Project

The project is mainly directed towards developing an android mobile application for the user (customer) and a web based system for the vendors and product owners to facilitate their requirements.

The user of the mobile application is given the chance to include their preferred categories of interests to the system so that they would be able to either search for offers for those types of items, or would get notified about places which have the preferred offers if they are within a specified radius of distance from the customer's current location. The vendors will get the opportunity to update their offers on certain product categories in the web based system and advertise their new arrivals on the site.

The application is mainly targeting the local market but in contrast this can also be used globally with minimal adjustments. The vendors will need to get registered and maintain their individual profiles, where as anyone who would download the app will get the benefit of easy access to offers on their favorite products.

# 3. Tentative Problem Definition

In the point of view of a vendor or a business owner, the consumption pattern of the present day customer has been deviated vastly from that of the customer a few decades back. With the advancing needs and requirements of the current society, the market today has grown much broader and is very much competitive. More the number of choices a customer has, higher it becomes the need of advanced strategies in order to attract the customer to their product.

At the same time a customer might as well want to go for a product which would be more monetary beneficial for him than another. And it is his necessity that he gets in touch with the best priced product easily out of all other products in the market.

Hence it is important that there is some mean of establishing a precise interacting environment for the vendors and customers to acquire their requirements as desired. The main objective of the project is to provide this platform forboth the parties to communicate easily and effectively. The vendors will get a chance to promote their offers of sales, discounts etc. through the application to the general customer, and the customer will be able to identify the best prices or offers for the products he would wish to buy. The outcome of the project would be beneficial for both the customer and the vendor in their own contexts.

# 4. The Goal and Objectives

**Goal**: To be the pioneer brand in mobile marketing.

The following objectives are expected to be met with the successful implementation of the project.

#### ■ Win a wider range of customer base for the app

In the ride to achieve our desired goal, it's our belief that winning the customer base is a predominant requirement for the establishment of the business. Since similar apps are already in the market, it is intended to gain a competitive advantage over the peer apps by attracting the customer with the introduction of unique and interesting features in the meantime.

#### Open up the local customer to a new dimension in the shopping experience

In an environment where most customers are used to shop in the same old traditional manner, it is intended to draw their attention towards the much feasible and less time consuming new trend. Giving them an option which adopts to their variant needs with the click of a button would get the customer to a revolutionary experience in shopping.

#### Increase the customer audience of the vendors

In order to achieve our prime goal it is very much vital that the vendors of all categories remain keen with the app and attract more vendors to advertise their offers in the site. To gain this target, increasing the customer audience for each vendor appears as a significant task. Introducing all offers to the interested parties and stimulating them to purchase them is quite the objective in this case.

# 5. Brief Introduction to the Project

## 5.1. Issues addressed by the project

When considering the marketing strategies followed by the vendors to advertise offers and how the customers respond to them in the general context, there are clear issues that need to be addressed which have affected adversely in both the customer's and the vendor's point of view. The traditional means of advertising the offers which would most probably be paper advertisements, television advertisements, leaflets etc. cause a lot of complications in reaching the targeted customer at the correct time. The following issues are supposed to be addressed and overcome by the intended project.

#### The audience addressed not being the most interested one

The traditional advertising criterion doesn't allow means of advertising the offers only to the interested crowd. Hence sometimes the offer would be known mostly to parties who are not concerned while the intended audience doesn't receive the information. With this app each user is given the option to select their interested list of categories at the very beginning, thus assuring that the most relevant offers will reach the exact audience which is interested in buying that product.

#### Limitation of the crowd the offer is advertised to

Certain marketing plans don't offer the opportunity for the information to reach the mass. But this application will be used by android users all-around who are interested in offers and deals.

Therefore it is guaranteed that a majority of the interested crowd will get in touch with the offer details.

#### The offers being expired when the customer plans to buy it

With certain limitations in advertising methodologies, there are situations where the offer details don't reach the customer at the correct time. For example, when a customer gets to know about a particular offer advertised on a newspaper, that offer might already have been expired. Since our app would only notify about the currently active offers it is much useful and trustworthy for the customer.

#### The difficulty faced by thecustomers in discovering the interested offers

The options available in the current context for a customer to search for an offer in a field of his interest are very much less and time consuming. But the app provides easy access for all offers in a

variety of interest fields and the customer can change his preferences at any time and search for offers as well as get notified with offers near his location.

#### The cost of advertising offers on traditional media

Usually the cost of advertising an offer on any media (television, newspapers etc.) would be costly. The proposed app is not intended to charge the vendors for advertising offers. Hence that cost is reduced to a minimum.

## 5.2. Similar products in the market

#### 🖶 Groupon

Grouponis a deal-of-the-day website that features discounted gift certificates usable at local or national companies. Groupon was launched in November 2008, and the first market for Groupon was Chicago, followed soon thereafter by more than 250 markets around the world and had 35 million registered users [1]. It is considered one of the most successful startups of all time by market capitalization, revenue, growth and cultural impact. The company offers one "Groupon" per day in each of the markets it serves. If a certain number of people sign up for the offer, then the deal becomes available to all. If the predetermined minimum is not met, no one gets the deal that day. Groupon makes money by keeping approximately half the money the customer pays for the coupon. It has also developed an application aimed at Smartphone and tablet users, consisting of the two buttons: "I'm Hungry" and "I'm Bored," which locate the closest and best deals for food or entertainment, respectively, using geo-location.

#### 4 Yipit

Yipit aggregates daily deals from all of the web's most popular services, filters them based on your preferences, and only shows you the deals you actually want to see, and only when you want to see them. Yipit only requires an email address to sign up. Once you have an account, the app asks you to walk through the types of deals you'd like to be notified about[2]. You can select or de-select specific deal categories at any time if the results don't work for you, and the site gives you examples of each so you know what you're getting into before you sign up. The flexibility and customization options that Yipit provides are enough to make it worth a look.

#### LivingSocial

LivingSocial is a leading marketplace to buy and share the best things to do in your city – or wherever you may be. They provide a trusted, convenient source for finding value on everyday items and activities and identifying novel, enriching and fun experiences for the user to enjoy and share with

friends. With thousands of unique and diverse offers every day, they inspire the members to discover everything from weekend excursions to international travel, from exclusive gourmet dinners to family outings and more. Also they help local and national businesses grow by introducing them to high-quality new customers. Based in Washington, DC, LivingSocial has more than 60 million members around the world and has sold more than 205 million vouchers to date [3].

## 5.3. Uniqueness of the product

- Compared to the similar products in the market, the proposed app claims to consist of a unique combination of features as follows;
- → This would be the first app of this kind which is optimized for the local market. The app is targeting mainly the Sri Lankan products and offers and will be a new experience for most of the Sri Lankan android users.
- ♣ The app provides an option for the users to recommend offers to friends through mail allowing them to convince other customers to try out an offer they have purchased.
- The user can connect to his FourSquare account to be notified of daily offers at places he or his friends check in often, if he wishes to.

## 5.4. Envisaged commercial potential of the product

The initial stage of implementation of the project is not targeted towards earning profits as it is mainly focused on making the application popular among the crowd. It is intended to extend the app in the future aiming the market and earning and increasing the profits. The following strategies are expected to be followed in the process.

#### Featured offers:

In the initial phase of the implementation, it will only display the offers of interested categories selected by each customer, and there will be no option for the vendors to promote and highlight their offer among the similar ones. But it is expected to upgrade it where they can pay for 'featured offers' giving it more attention prompting the customers to try it out.

#### Purchase offers through the app:

Although the current scope of the project doesn't involve a feature for the customer to purchase offers, it will be extended giving the customer the opportunity to purchase them through the app itself making more profit through that.

## **↓** Integrate the app with a Mobile Marketing service provider

The app is intended to be integrated with a mobile service provider such as zMessenger in order to bring more customer interaction to the product and to define strategies to increase the revenue generated.

# 6. Scope of the Project

## **6.1. Requirement Analysis**

#### **6.1.1.** Functional requirements

#### Mobile Application

- **◆ Select categories:** The user is given a pre specified set of categories of items so that he would be able to check for only the products he is currently interested in. He can change his list of preferences at any given time.
- Notify about offers: If the user has already selected his preferred item list, he would be notified if an offer related to a product in his preferred list is available in a venue within a given perimeter from the current user location. It is expected to give the user the option to change the perimeter he wishes to get notifications within, as he desires.
- Search the precise location of the offer: If a specific user is interested in purchasing the offer he is notified, he should be given the opportunity to search for the location of the vendor through a map.
- ♣ Search for offers: Apart from the notifications, user is also able to search for places (vendors) having offers related to his choice list. The offers could either be within a specified perimeter within his location or else he could search for all available offers.
- ♣ Rate/comment on vendors: The user needs to be given the option to rate or comment on a certain vendor who advertises an offer. The ratings would be displayed when any user views an offer and he can decide on purchasing it based on the reviews.
- ♣ Recommend offers to friends: The users can recommend interesting offers to other users of the app through mail.
- **FourSquare:**If the user chooses, he can connect to hisFourSquare account to be notified of daily offers at places he or his friends check in often.

#### Web based system

 Registration: All vendors should register into the system with a unique identity which would allow them to login to their individual profile when updating offers.

 Update offers: The vendor can update details about their offers on a daily basis through their profile.

 Advertise on products(new arrivals): The vendors are also given an option to advertise their new arrivals on the site if required.

## 6.1.2. Non-functional requirements

#### Performance

It is important that the application shows optimal performance with minimal conditions since data pushed from the server needs to be delivered to the user's device at the required time.

#### User friendliness

Both the app and the web based system need to give the users a good browsing experience even with a less knowledge on technical aspects. It should be simple, elegant and at the same time should clarify every option the user has in a comfortable manner.

#### Extensibility

Since the current target is to develop the app only up to an extent where the user would be notified with the address of the venue where his offer is, it needs to be extensible so that the user can locate the exact venue through a map.

#### Maintainability

The app needs to be maintainable mainly because future extensions are expected. And at the same time it has to ensure that future defect isolation and correction would not cause extra inconveniences due to improperly maintained coding. As an assistance for this the source code of the will be uploaded to GitHub.

#### Security

Confidential data regarding the vendors will be stored within the web server and it needs to be ensured that they are protected. And any malicious attack to the server might result in trust issues among the users which would affect the customer base of the app. Hence high precautions need to be adopted to protect the server from third party involvements.

#### Recovery

The data that is obtained through the vendor profiles need to be restored in the server in event of a threat or a disaster. Any system failure needs to ensure that regardless of the reason, the system could

be restored and operated with minimal interruption within a small time period so that the users of the app will continue to receive notifications as expected.

#### 6.1.3. Resource requirements

#### ♣ Web Site

- For the website server, we are interested in using, PHP, APACHE, MySQL facilitate server (from Hostgator). Economic feasibility, large community support and Open Source framework availability leads for the reason. PostgreSQL considered at first, but initial investment is high, decided to move along with MySQL/MySQLi.
- Twitter Bootstrap is intended to be used as front-end framework as it is adhered to Golden Ratio and because of the responsive web design capability. Furthermore, Bootstrap is a light weight framework, so that performance is enhanced.
- With the intension of extending the project scope, an object oriented PHP framework will be used in the development phase.

#### Mobile App

- Android mobiles which are equal or above Android 2.2 API level will be used as target devices. It is expected to use android instead of any other operating system due to the market share it has over other competitors such as windows.
- GPS function is a vital requirement in the mobile device.

#### Internet resource requirements

- Broadband internet connections for stable internet connections.
- Wi-Fi connections.
- JavaScript enabled browsers for client side validations

#### Notification System

Google Cloud Messaging (GCM)

## 6.2. Requirement gathering approaches

#### Brainstorm meetings

Brainstorm meetings would be the most significant approach to gather requirements as the product is client independent, to come up with new ideas and creative solutions to the problem.

#### Study the peer systems in the market

Some peer systems are to be studied in order to get an idea about the project and understand the requirements.

Eg: Groupon, Redknot, Appdeals, Yipit

## 6.3. Evaluation approaches

#### Benchmarking with the existing systems.

DDMS is used to break down what the application is and for how long it takes to do something in the application. It is useful in ensuring that the things are done in the fastest way possible, rather than within a certain time window.

#### Customer reviews

User rating and reviews, engagement, and user retention are directly the long-term success of the application. Android users expect high-quality apps, even more so if they've spent money on them. Hence it becomes a significant criterion to evaluate the success of the project.

#### Vendor reviews

Reviews given by the vendor through their experience and difference in the customer base due to the use of app are useful in improving the quality of the final product and providing a better service in the future with additional features.

#### Sales statistics

Sales statistics would pave way to get information about device statistics, user statistics, ratings statistics and crash statistics which are important in evaluating the final product.

# 6.4. Tools and technologies to be used

#### Technologies

- PHP
- MySQL/MySQLi
- JQuery
- Java
- JavaScript
- Json
- Ajax

#### Developer Tools

- Android Studio
- Eclipse
- Google Maps API
- Google Cloud Message API
- GIT (version controller)
- Fire Bug
- Dreamweaver
- BugZilla

## 6.5. Targeted Audience

The app would be much useful in a context where the user is more of a traveler. Since the most significant feature of the app is the notification system, where the customer is notified about nearby offers related to their interested fields while they travel, it is much valuable for a traveler.

# 7. Deliverables of the Project

#### Android app

The app is to be developed placing the user experience and sleek intuitive design at the forefront of our product design philosophy. Our focus is predominantly on the user experience and good design.

#### Website

The website is to be delivered combined with marketing and search engine optimization activities which would play an increasingly crucial role in helping the vendors achieve their objectives.

#### Final report

The final report willdescribe the nature and scope of the project. Report summarizes everything we set out to achieve and provide a clear summary of the project's background, relevance, main contributions and technical details.

#### User manual

A user manual is to be launched providing technical communication documentation to both technical and non-technical users to interact with our product in an easy way.

#### Developer API

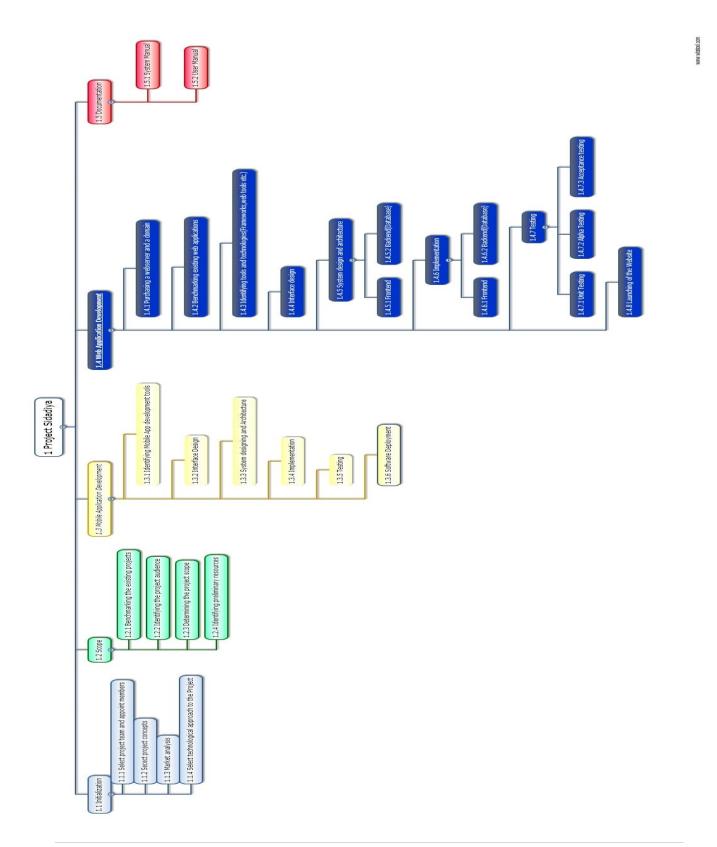
The developer API would allow many developers to build web pages and web based applications and will help to increase the popularity of the targeted project.

#### You-tube channel

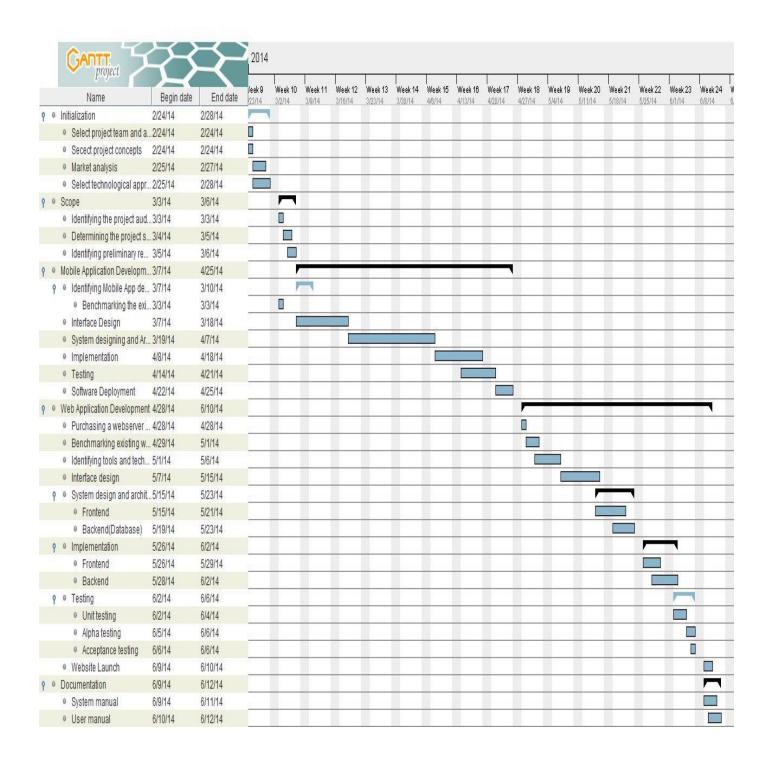
It is an essential tool for the project as we are looking to reach a larger audience. The fact that it is extremely easy to use, and provides a brilliant platform for communication adds to its appeal.

# 8. Project Plan

# 8.1. Work breakdown structure



#### 8.2. Gantt chart



# 9. References

 [1] "Groupon", Wikipedia the free encyclopedia.[online]. Available: http://en.wikipedia.org/wiki/Groupon[Accessed:March 11, 2014]

- 2) [2] "YipIt Collects Daily Deals from Around the Web, Only Sends You The Ones You Would Actually Like", lifehacker, January 20,2012. [online]. Available: <a href="http://lifehacker.com/5877806/yipit-collects-daily-deals-from-around-the-web-only-sends-you-the-ones-you-would-actually-like">http://lifehacker.com/5877806/yipit-collects-daily-deals-from-around-the-web-only-sends-you-the-ones-you-would-actually-like</a> [Accessed: March 12,2014]
- [3]"about LivingSocial: our company",
   livingsocial.[online].Available: <a href="http://corporate.livingsocial.com/ourcompany/">http://corporate.livingsocial.com/ourcompany/</a>[Accessed:March 12, 2014]

# 10.Declaration

We as members of the project titled 'Sidadiya', certify that we will carry out this projectaccording to guidelines provided by the coordinators and supervisors of the course as wellas we will not incorporate, without acknowledgement, any material previously submittedfor a degree or diploma in any university. To the best of our knowledge and belief, the project work will not contain any material previously published or written by another person or ourselves except where due reference is made in the text of appropriate places.

- L.G.H.C. Nalinda
- S.W.A.D.M. Samarasinghe
- M.D.C.M. Gunatilaka
- M.C.A. Amarasinghe
- H.M.U.S. Gunasinghe

#### Approval of the supervisor

Name	:	Dr. D. D. Karunaratne
Signatur	e:	
Date	:	