

LINKED UP WEB APPS AND WEB SERVICES

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## **EXECUTIVE SUMMARY**

Business card exchanges between business people considered one of the most important matter in starting the relationship between potential clients. However, business card has several problem such as limited card and easy to lose.

This project is named Linked Up. Linked Up project carried out in collaboration with ADAVISTA Sdn Bhd using Adacode platform and Wired Sdn Bhd utilize NANAS MVC framework. This project is aim to develop digital business cards solution in web app and mobile app, with HTML as interface and PHP as engine for web app. For mobile app, it will build in IOS and Android platform. Primary target user of this project is business people who use cards as medium of contact and information exchanges.

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## LIST OF ABBREVIATIONS

<b>ABBREAVIATION</b>	<b>TITLE</b>
PHP	Hypertext Preprocessor
SRS	Software Requirements Specification
ERD	Entity Relationship Diagram
MVC	Model View Controller
SDD	Software Design Documentation

## **PART 1.1**

### **INTRODUCTION**

#### **1.1.1 Introduction**

Business card exchanges between business people considered one of the most important matter in starting the relationship between potential clients. Cards provide a simple and efficient way to disperse business contacts, hence it is the preferred method of choice for most people.

At World Marketing Summit 2013 (WMS 2013), more than 1000 businessman, industry leaders, speakers and marketing gurus come from around the world. People were trying to get to know each other, cards exchanges happen all the time. In the course of the event, we found out that people are carrying too many cards, we also believe that some of the cards may be lost or dropped. Delegates of WMS 2013 might be preparing a sheer numbers of cards before the event, and with it comes significant cost. It is wasteful for the delegates if their cards lost because of one poor management of contacts, and it is also a hassle for them to keep track of collected cards.

The inspiration came to develop Linked Up, a digital mobile business card app and based on LinkedIn philosophy, “Connect. Find. Be found”. Imagine a seamless way to exchange business contacts on your smart device. Gone were the days of handing out business cards, it is now beyond it, people can exchange contacts on-the-fly and stay connected.



With Linked Up, no business card is lost, people can decrease the cost of printing cards and the not-so-sexy large pocket bulge will be gone.

### **1.1.2 Problem Statement**

Business card can help you to get in touch with the people that you need in the future whether it for business or personal affairs. The cards will surely stacked up, accumulation will occurs and people are getting harder to manage and keep track all the cards. Even worse, the important contact might be lost, business deal and opportunities gone. Sometimes, business people might run out of cards too!

The cards once printed, the information stays. To edit a simple information might cost more to the user because they need to print a new batch. The old cards will be obsolete and wasteful. People that having the old cards also might face the problem of not knowing the changes on the cards information.

### **1.1.3 Objectives**

To create a digital business card solution (web app + mobile app) to manage business contact details and make it seamless through all devices which provide the solution to:

1. To develop a digital solution for user to manage their business card and contacts, hence tackling the issue of difficulties of having too many cards in disposal.
2. To create a digital business card to complement the current traditional card.

3. To make the process of exchanging contacts and cards seamless and easy through any medium (web and mobile).

#### **1.1.4 Scope**

This project is named Linked Up. This project carried out in collaboration with ADAVISTA Sdn Bhd using Adacode platform and Wired Sdn Bhd utilize NANAS MVC framework. Real user will be participated in this project. Below are the scopes:

1. This project is aim to develop digital business cards solution in web app and mobile app, with HTML as interface and PHP as engine for web app. For mobile app, it will build in IOS and Android platform.
2. Primary target user of this project is business people who use cards as medium of contact and information exchanges.

## **PART 1.2**

### **EXISTING SYSTEM**

This chapter will briefly explain about the similar system of Linked Up and its limitation.

#### **1.1 Introduction**

There are so many alternative to business card that businessman can use as exchanging their contact with others. After the several research, the best alternative is to use social network. However, there are so many social network in internet now. Businessman must choose it wisely become sometime social network also can bring the business down. Here, two similar social network had been choose; Linked In and About.me

#### **1.2 Review of Existing System**

##### **1.2.1 Linked In**

LinkedIn is a social networking website for people in professional occupations. Founded in December 2002 and launched on May 5, 2003, it is mainly used for professional networking. A mobile version of the site

was launched in February 2008, which gives access to a reduced feature set over a mobile phone.

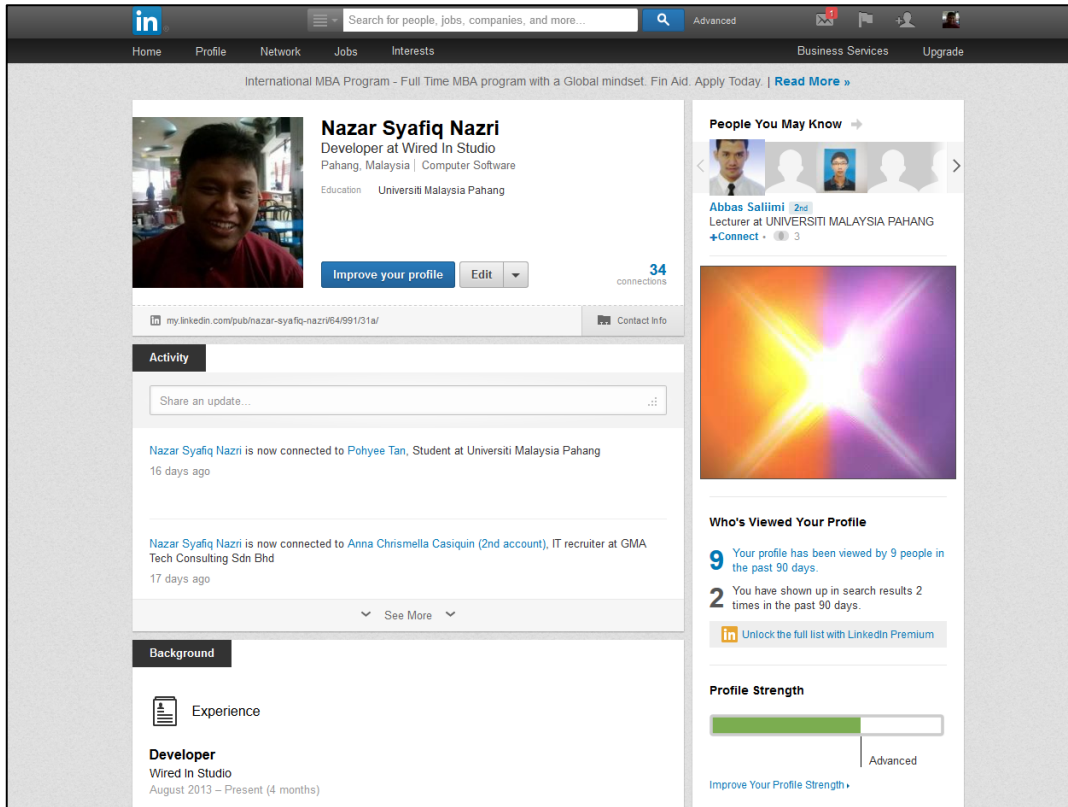


Figure 1 - Linked In Snapshot

LinkedIn is the really best platform to promote ourselves to other company. With function that allow another user rate our skill made it the best solution to replace old resume.

Pros	Cons
The best online professional network you'll find. Can add multimedia to resume-inspired profiles. Excellent job board. Great search capabilities.	Excessive email communication by default, with 25 'unsubscribe' or similar preferences to decrease it. Profiles not well designed for all types of workers.

Table 1 - Linked In Pros and Cons

## 1.2.2 About.me

About.me is a personal web hosting service co-founded by Ryan Freitas, Tony Conrad and Tim Young in October 2009. The site offers registered users a simple platform from which to link multiple online identities, relevant external sites, and popular social networking websites such as Facebook, Flickr, Google+, LinkedIn, Twitter, Tumblr, and YouTube. It is characterized by its one-page user profiles, each with a large, often-artistic background image and abbreviated biography.



Figure 2 - About.me Snapshot

About.me is more simple than Linked In. It just a connection between the other social network with a page that user can edit as landing page to access user's profile. User also can see who viewed them. About.me also give user a free email.

Pros	Cons
Totally free. Ultra-simple page editing. Free email address associated to site. Real-time traffic stats. iPhone app available.	No domain name support. No extra layout options. Faux social-networking.

Table 2 - Pros and Cons for About.me

### 1.3 Limitation and Suggestion

#### 1.3.1 Limitation to Linked In and About.me

About.me and Linked In come with their own pros and cons. The best point of them is they can promote the user to others in the professional way. This is the point that Linked Up want to take. The only limitation here, the website system. The Linked Up give a best profile with their aim to give user new way of resume, but this also their limitation where user must input many things from their education to all their work experience. About.me is the simple way for user to give information like business card. But, it no exclusivity towards business exchange activity.

#### 1.3.2 Suggestion to Linked Up

The first thing, number phone is the thing that must have in profile. As a support to business card, number phone is really important thing for businessman. Second, there will no web system for user to use. This make it like business card feel. However, user still can add website url in system. For user that do not have smart phone, they still can see their card, but it more like a card in browser not a website.

## **1.4 Report Outline**

The overall of this report consist of three (3) main parts. Part 1 will discuss on the purpose of the project, existing system that related to the proposed system.

Part 2 will discuss on user requirement, design description, development plan and testing plan on the system.

Finally, it will discuss on the conclusion obtain in the overall process of the development of the system.

## **PART II**

### **REPORT BODY**

#### **2.1 User Requirement Specification**

All user requirements will be detailed out in the Software Requirement Specification. Due the length of SRS, it have been located at Appendix A.

#### **2.2 Software Design Documentation**

All the detailed design of the portal system is documented in the Software Design Documentation. Due to the length of SDD, it have been located at Appendix B.



## **2.3 System Implementation**

The main purpose of this section is to document all the process and steps that involves in developing the portal. In the other word, this chapter is explaining about the development of this designed project. All the content that contain in this chapter is depend on the project that has been developed. So, this chapter also will explain details on how we implement the entire subject that has been discussed earlier.

### **2.3.1 Interface Development**

An interface will always be seen as a skin for the whole system, a great system without a sufficient interface could make it unbearable to use. As stated in ISO 9126, usability is one of those element that should be consider in delivering a product. Although this portal doesn't focus all that much on designing interface but it thrive to be usable and understandable for its target audience.

In order to achieve a desirable end product within a limited time constrain, this project implement front end web framework called Bootstrap 3.0.0.

#### **2.3.1.1 Bootstrap 3.0.0 Implementation**

##### **2.3.1.1.1 What is Bootstrap 3.0.0**

Bootstrap is a free collection of tools for creating websites and web applications. It contains HTML and CSS-based design templates for typography, forms, buttons, navigation

and other interface components, as well as optional JavaScript extensions.

#### 2.3.1.1.2 Advantage of Bootstrap 3.0.0

- i. Grid system and responsive design - Bootstrap comes standard with a 940 pixel wide, grid layout. Alternatively, the developer can use a variable-width layout. For both cases, the toolkit has four variations to make use of different resolutions and types of devices: mobile phones, portrait and landscape, tablets and PCs with low and high resolution. Each variation adjusts the width of the columns.
- ii. Understanding the CSS style sheet - Bootstrap provides a set of style sheets that provide basic style definitions for all key HTML components. These provide uniform, modern appearance for formatting text, tables and form elements.
- iii. Re-usable components - In addition to the regular HTML elements, Bootstrap contains other commonly used interface elements. These include buttons with advanced features, labels, advanced typographic capabilities, thumbnails, warning messages and a progress bar.
- iv. JavaScript components - Bootstrap comes with several JavaScript components in a form of jQuery plugin. They provide additional user-interface elements such as dialog boxes, tooltips, and carousels. They also extend the functionality of some existing interface elements, including for example an auto-complete function for input fields.

#### 2.3.1.1.3 Challenges and Disadvantages in Using Bootstrap 3.0.0

There are no any real challenges to use Bootstrap 3.0.0 because there are so many examples to refer and the documentation of Bootstrap 3.0.0 is very easy to use.

### 2.3.2 Back End and Features Development

While the front end codes create the interface and the look of the portal, the back end codes enable the portal to have its designed features implemented. In developing the back end codes for this portal, the PHP language had been chosen as its server side scripting language. Over the years, PHP had been very mature and safe to become one of the best server side scripting for a web based system. The support and documentation were great and easy to understand, in addition to its large user base that could assist in solving problem during the portal development.

In developing Linked Up administrator side and web service, Nanas MVC framework had been choose because it really help to make sure the web will be dynamic and can be extend

#### 2.3.2.1 MVC (Model View Controller) Architecture

Before discussing more on how Nanas MVC framework is implemented in the portal, let's have a quick look at what is MVC and how it operates.

To put it in a simple word, MVC is an architecture where each of its component have their own task as well as interacting

with each other to make the whole system working. M stands for model and its job is to manipulate the database according to the system needs.

V stands for view, and as its name stands out, view is the medium which users interact with the system. View is also where all the interface will be developed and consists of front-end web programming language like HTML, CSS and JavaScript.

The last of the three is, controller, here reside all the logic of the system. Nearly all decision making is executed here and every interaction between view and model will go through here. Mostly of the server-side scripting is done here, and it could be said that the controller is the brain of the system itself.

### **2.3.2.2 Nanas MVC Framework Implementation**

This section will be discussing about how Nanas MVC framework were implemented in this project

#### **2.3.2.2.1 What is Nanas MVC Framework**

Nanas MVC Framework is the simplest MVC PHP Framework that is easy to use for the beginner that wants to learn MVC.

#### **2.3.2.2.2 Implementation of Nanas MVC Framework**

Actually for the complex or real development implementation, this MVC is not recommended because this framework is very plain and does not have many great features like another framework such as ZendPHP Framework.

Decide to use because want to helping the improvement of Nanas MVC and it also easy to use compare to another framework.

Nanas MVC is helping this project to separate the design and back end code which it's really helping to maintain and find error. Back end code will save in controllers folder, for connection to database code will save in model folder and for design will be save in view folder.

#### 2.3.2.2.3 Advantage of Nanas MVC Framework

- i. Easy to manage the design and code : php coding has been separate with design code. This help in development and make the system more flexible to improve and add new feature.
- ii. Can apply the bootstrap easier : because the design and code separate, it really easy to apply bootstrap in the framework.
- iii. Have features to call another page in another page : this function really helps in design where the same design can use it several time with same coding.

#### 2.3.2.2.4 Challenges and Disadvantages in Using Nanas MVC Framework

Because this Nanas MVC Framework still new, it do not have any documentation that support development.

### **2.3.3 Database Implementation**

Linked Up is using Ada Code Database. For the security reason, this report will view only the important table and relation between the table. There are 3 tables that always use in Linked Up. There are account, code and users. Anyone that register to Ada Code service will have their profile and login detail in account. Then, the code will start generate and users table will connect account and code. The Linked Up also use the same flows as Linked Up is one of Ada Code service. Below is the table relations

## **2.4 Technical results and comparison**

During the planning stage, there are list of features that have been prepare to implement in the web application and web service. The features of web service more to what the mobile application can do.

## **2.5 Discussion and Analysis of Material**

In Linked Up Web Application and Web Service implementation, there were some tools used to assist the development of the whole project. Below is the list of tools.

1. IDE : Aptana Studio 3

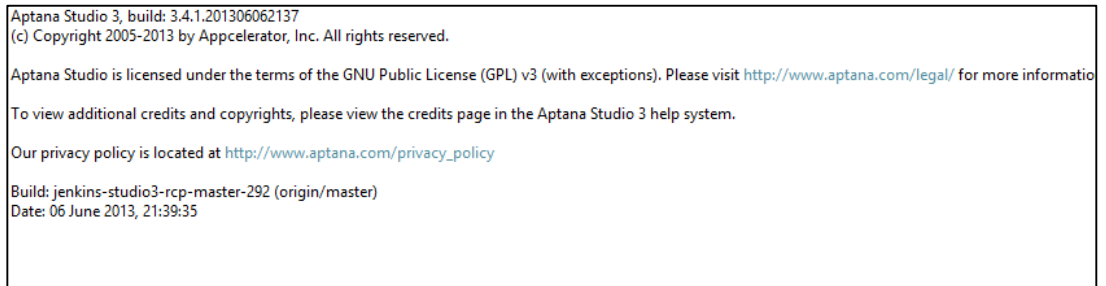


Figure 3 – Aptana Studio Info

2. Database : MySQL

3. Database Tool : MySQL Workbench 6.0 CE



Figure 4 - MySQL Workbench Info

4. Web Server : Linux CentOS
5. Web Server Tool : WinSCP

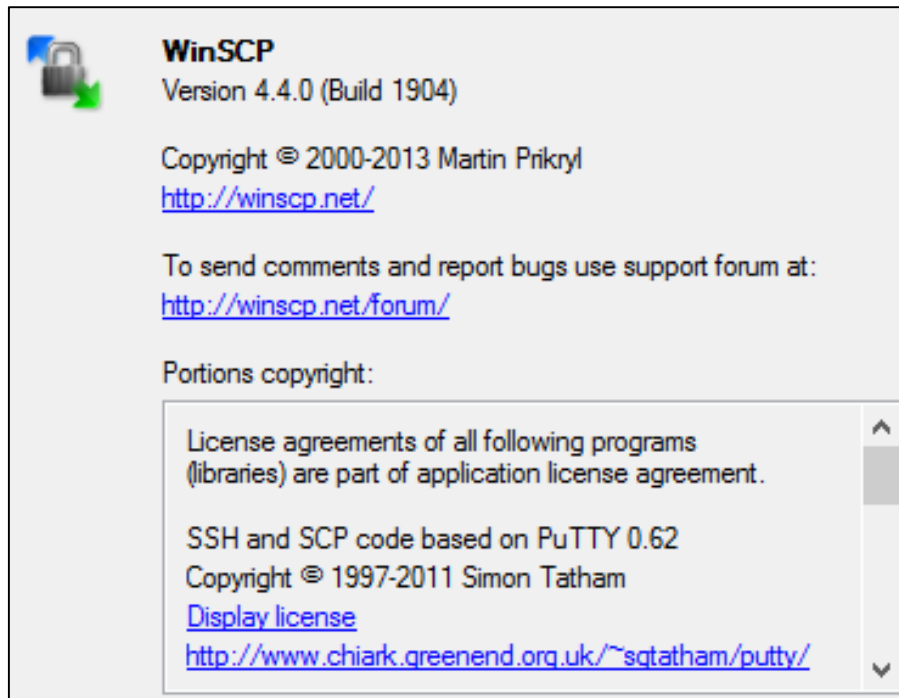


Figure 5 - WinSCP Info