



RESEARCH ARTICLE

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# Crawdfunding System WithLaravel Framework and VPS

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# Abstract:

Information Technology is growing rapidly, business actors have started to use a lot of website media in developing their businesses. Many new domains have sprung up which are business people developing business promotion on the internet. Business opportunities have begun to be in demand among young people but not most of them are able to carry out their business due to capital constraints. Crawdfunding is the practice of raising funds from a large number of people to capitalize on a project or business that is generally carried out through the internet. Web based crawdfunding system with laravel framework and virtual private server will strengthen security from the application and data side. Virtual Private Server (VPS) is a cloud-based computing where data and systems are stored all in one private account instead of shared hosting that is commonly used. This system was built to make it easier for business people who have minimal capital but can still run a business.

Keywords — technology, crawdfunding, laravel, vps.

# I. INTRODUCTION

The development of computer technology from time to time continues to experience improvement and development. This is supported by the development of increasingly advanced and adequate technology. Making it possible to create and develop various applications, which make information accessible quickly, precisely, current and accurate. Business actors have started marketing their products through internet media.

Crawdfunding is the practice of raising funds from a large number of people to capitalize on a project or business that is generally carried out through the internet. In this case the investor with a business to be financed will be established directly through the crawdfunding. Through intermediary this crawdfunding, business actors can finance the desired business even though they only have minimal capital, because in this crawdfunding system, business actors are invited to join together to build a business. The profit earned by the business actor will remain the same as the capital invested.

Based on this problem by analyzing these symptoms, then a web-based Crawdfunding system with a laravel framework and a virtual private server will strengthen security in terms of application and data. Virtual Private Server (VPS) is a cloud-based computing where data and systems are stored all in one private account instead of shared hosting that is commonly used. This system was built to make it easier for business people who have minimal capital but can still run a business. The products that will be invited to work together are businesses that have passed strict risk mitigation, are already running and are profitable. With the existence of this Laravel framework adds insight into the php frameworks that have sprung up a lot, as well as how to implement them in the form of a business that can be useful for both individuals and the community. Whereas VPS (Virtual Private Server) helps in cloud computing where all applications will be installed in VPS and accessed with a high level of security.

# **II. METHOD OF RESEARCH**

A. Setting and Installation

Laravel is a PHP framework that is starting to become popular because of its translation and users. How to install Windows / OS X is very easy by installing the composer. Before installing the maker, download the file at https://getcomposer.org/download/ and make sure your PC / laptop has XAMPP installed because it requires PHP built-in.

How to Install on OS X:

```
php -r "copy('https://getcomposer.org/installer',
'composer-setup.php');"
php -r "if (hash_file('sha384', 'composer-setup.php') ===
'93b54496392c062774670ac18b134c3b3a95e5a5e5c8f1
a9f115f203b75bf9a129d5daa8ba6a13e2cc8a1da0806388
a8') { echo 'Installer verified'; } else { echo 'Installer
corrupt'; unlink('composer-setup.php'); } echo PHP_EOL;"
php composer-setup.php
php -r "unlink('composer-setup.php');"
mvcomposer.phar /usr/local/bin/composer
```

For the test composer installed please type "composer" then enter.

How to Install on OS Windows :

Open the link https://getcomposer.org/Composer-Setup.exe, then follow the installation instructions to complete, if you have finished the test composer has been installed please type "composer" then enter.

Microsoft Windows [Version 10. (c) 2019 Microsoft Corporation	
C:\Users\AGP>composer	
(	///
Usage:	
command [options] [arguments	1
Options:	
-h,help	Display this help message
-q,quiet -V,version	Do not output any message Display this application version
ansi	Force ANSI output
	Disable ANSI output
-n,no-interaction	
profile	
no-plugins	
	R If specified, use the given directory as working directory.
-vivvivvv,verbose	Increase the verbosity of messages: 1 for normal output, 2 for more verbose output and

Fig 1 Composser Running

Start using laravel by creating a project:

composer create-project --preferdistlaravel/laravelcrawdfunding\_sistem

**create-project** is used for Commands to create new projects

--prefer-dist to order the download of the recommended version of the stable or the stable version (newest).

**crawdfunding\_sistem** is the name of the laravel project that we want to create.

To run the laravel application we have made use of:

php artisan serve

### B. Software Spesification

The Laravel framework has a few system requirements. Of course, all of these requirements are satisfied by the Laravel Homestead virtual machine, so it's highly recommended that you use Homestead as your local Laravel development environment.

However, if you are not using Homestead, you will need to make sure your server meets the following requirements:

- PHP >= 7.1.3
- OpenSSL PHP Extension
- PDO PHP Extension
- Mbstring PHP Extension
- Tokenizer PHP Extension
- XML PHP Extension
- Ctype PHP Extension
- JSON PHP Extension

# C. Application Development Methodology

A project with Scrum method begins with a depiction of the system that will be done. Then the Project Owner depicts the business process or plan into a Product Backlog(Pham, Pham et al. 2011). Product Backlog is a list of plans that must be done by the team.

There is a term in Scrum called the Sprint. Sprint is the goal to be achieved in the next scrum sprint (30 days ahead). Each Sprint starts with a Sprint Meeting Planing which is an activities to determine what kind of sprint to do next. Every day, each team gather together and discuss "What has been done since the last Daily Scrum Meeting?", "What problems are encountered during the work?", And "What will be done for the next scrum?"(Opelt and

Books24x7 Inc. 2013). The meeting will be chaired by the Scrum Master and at the end of the sprint there will be a meeting for 4 hours to do a demo against everything that has been done.



Fig 2 Scrum Methodology Flow

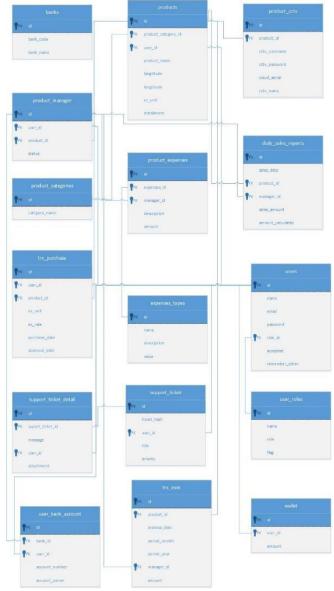
The research steps starts from the Development Preparation, maximize the writer/researcher study of literature for a deeper comprehension of the Scrum Method on a project.

Besides the study of literature, author will also do consultations with the people who have been involved directly in Scrum to find information related to the challenges and obstacles during the process. The study also gives the knowledge about the Scrum framework and its implementation on the software development project management.

# III. DISCUSSION

#### D. Design and Implementation

The entire document should be in Times New Roman or Times font. Type 3 fonts must not be



#### Fig 3 ERD Crawdfunding System

 TABLE 1

 ENTITY RELATIONSHIP DIAGRAM (ERD) CRAWDFUNDING

No	Menu	Description			
1	Banks	Table of List Bank Account			
2	Products	Table for Product Launch on crawdfunding			
3	Product_cctv	Table for information access cctv camera			
4	Product_manager	Table for List Manager on Product Maintenance			
5	Product_expenses	Table for expenses detail product			
6	Daily_sales_report	Table used record transaction per days			
7	Product_category	Tabel for list type product			
8	Trx_purchase	Table for purchase product per customer			

9	Expenses_type	Table list expenses type
10	Users	Table for user information
		and detail
11	Support_ticket	Table for track record
		problem customer
12	Support_ticket_detail	Tabel detail for record
		problem
13	User_roles	Table of User Access
14	User_bank_account	Table of Account Number
		Bank User
15	Trx_eom	Table transaction end of
		month
16	Wallet	Table for amount customer
		wallet

#### E. Application User Interfaces

This registration page is used for members or prospective entrepreneurs who want to invest in crawdfunding, after registration the investor will get an email for verification. Here is how it looks:

ramerame.co.id	HERMOLA CARANERS FAC TRACING CARE AND AND A
	Pendaftaran Sebagai Investor Baru
	Umah dapat menulai investasi, maka anda HABU samé mendiki akun di ramesana casi, Namun jisa anda sadah menuliki akun, sidalan lagin di siti
	Unnak sementara kami satankan agar emali yang digunakan satak registrasi akkuh coldet, dikarmakaan tahusi dan badoak mensiki sajankah anyara kent terikat danaki yang banu terkenak dalam mengirin emat.
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	Daftar
	Sudah memiliki akuri Masuk Sekarang

This main page can be opened by anyone, on this page will display a brief description of the crawdfunding system, products to be financed, current information about crawdfunding, partners and contacts of the crawdfunding manager, The following are the main pages of the crawdfunding system:

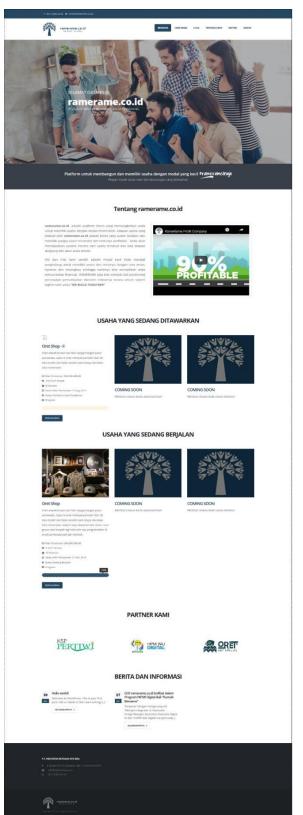


Fig 5 Crawdfunding Layout System

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Desires PROFE Television Larosan Rest Rest

This login page is used by members or entrepreneurs to enter the system, if the member forgets the password, then you can go through the "Forgot password" link to get a password reset. Following appearance:



**Fig 6 Login Form** 

This Dashboard page is used to find out what facilities are obtained by members, such as: Transactions, Reports, Profiles, Security, Tickets, and others. This page is also informed directly on the front page of the Wallet Balance and Investment Products that have been followed. Following appearance:



Fig 7 Dashboard Form

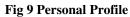
The Profit Graph page displays the amount of profit that has been received during the business and is immediately simulated in graphical form, with the following appearance:



**Fig 8 Profit Grapich** 

This personal profile page is used to change and complete personal data such as Personal Profile, Business Profile and Account. Here is how it looks:

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**Fig 10 Bussiness Profile** 

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Fig 11 Bank Profile User

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Fig 14 Submit Ticket

This Transaction page is used for deposit balances and withdrawal balances from the wallet. Here is how it looks:

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DALION MOFE IBANSA LAPONA INET IEDANAN

rame de lid Los marmos	Deposit Dana Anda Ke ramerame Wallet	
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		8
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		H Drug and strugs file trans or obtain

Ubah Sandi page is used for members who want to change their previous password to a new one. Here is how it looks:

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Fig 4 Change Password

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Fig 13 Wallet Withdraw

This Ticket Page is created so that when a member has a complaint or problem, it can be written and sent to the crawdfunding party via this menu. Here is how it looks:

# IV. CONCLUSIONS

After observing the results of the research trials the conclusions from this study are:

1. Web-based Crawdfunding can help young entrepreneurs or people who have minimal capital to have the business offered.

2. With this web-based crawdfunding, it helps the community to choose products that are financed or desired.

3. Web-based Crawdfunding makes it easy to monitor businesses and profits against funded products.

# ACKNOWLEDGMENT

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