

# Design of a Copy Service E-Marketplace Android-Based in the Parongpong District

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Author Notification

22 February 2020

Final Revised

26 February 2020

Published

26 February 2020

(APA style, Justify, Arial 10pt) Example:

To cite this document:

Zarlis, M., Harahap, E., & Husna, L. (2019). Test Appraisal System Application Based on YII Framework as Media Input Student Value Final Project and Thesis Session at Higher Education. *Aptisi Transactions On Technopreneurship (ATT)*, 1(1), 82-93. Retrieved from <https://pandawan.apptisi.or.id/index.php/att/article/view/59>

## Abstract

*Technology has an important role in the progress of doing business. Lately, the Indonesian e-marketplace industry is indeed very developed. They help Indonesian people to shop with just one click at their own home. The e-marketplace is a virtual online market platform where companies can register as buyers and sellers to conduct business to business transactions over the Internet. The use of the Internet has helped remove intermediaries in a transaction. The purpose of this study is to assist copy service owners in conducting conventional business activities to be digital business activities. And make it easier for customers to find a copy service in Parongpong District. This study uses 2 research methods, field surveys and literature studies. Researchers intend that the e-marketplace copy service android-based system will be used by owners of copy services to promote their services and is also expected to be used by consumers to order copy services.*

**Keywords:** Copy Service, E-Marketplace, Android-Based

## 1. Introduction

This section contains justifications for combining the old copy service method with the E-Marketplace for the advancement of the copy service business.

The E-Marketplace is an inter-organizational information system where buyers and sellers in the market communicate information about prices, products, and can complete transactions through electronic communication channels. (Rosidi, 2017)

Copy service providers write manually with paper and pen. Another problem is compilation that cannot handle the number of orders, but must continue to receive the other orders. The e-marketplace copy service android-based is the solution. By using the Internet and GPS, customers will be able to get customers who are following the closest distance. Similarly, customers can choose which copy services are best for them. copy service of Advent University of Indonesia is an official effort of UNAI under the auspices of UNAI Industrial. However, there are many copy services around Parongpong.

## 2. Research Method

A preliminary study was conducted to find out and analyze the problems faced by residents around Parongpong in finding a copy service providers. (Palopak & Lumbantobing, 2019)

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1. Field Survey

Data collection and system requirements are carried out through direct observation and interviews with parties who deal directly with problems, such as UNAI copy service supervisors, copy service providers around Parongpong, UNAI students, and also some residents around Parongpong.

2. Library Research

Conducting the collection of theoretical basis and references through reading reference books related to this research and from the Internet. (Saragih & Wagiu, 2019)

### **3. Findings**

#### **3.1 Theoretical Basis**

##### ***Research and Development Method (R&D)***

Research and experimental development (R&D) comprise creative and systematic work undertaken in order to increase the stock of knowledge—including knowledge of humankind, culture and society—and to devise new applications of available knowledge. A set of common features identifies R&D activities, even if these are carried out by different performers. R&D activities may be aimed at achieving either specific or general objectives. R&D is always aimed at new findings, based on original concepts (and their interpretation) or hypotheses. It is largely uncertain about its final outcome (or at least about the quantity of time and resources needed to achieve it), it is planned for and budgeted (even when carried out by individuals), and it is aimed at producing results that could be either freely transferred or traded in a marketplace. For an activity to be an R&D activity, it must satisfy five core criteria. (Moris, 2018)

##### ***The Unified Modeling Language (UML)***

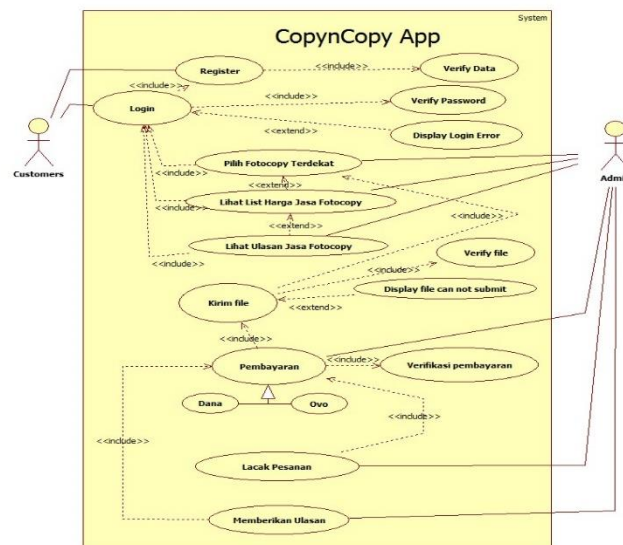
UML is a visual modeling language dominant in object-oriented software development. UML eventualities for acquire a global description of a given provider of the system and implementation code from the UML use case (provider) and suggests four operators: sequential operator, concurrent operator, conditional operator and generation operator to compose a set of eventualities that describe a use case of a given approach. (Rajagopal & Thilakavalli, 2017)

##### ***E-Marketplace***

E-marketplace is a type of ecommerce site that connects sellers that is people that provide products or services with buyers that is people looking for products or services to buy. In Indonesia, examples of e-commerce portals that have e-marketplace models are Tokopedia, Bukalapak, Lazada, Mataharimall, Shopee, and Blanja. This e-marketplace business model has an advantage in terms of inventory, operational and margin efficiencies so it becomes very popular and enthused by many companies. (Santoso & Napitupulu, 2018)

#### **3.2 Research Implementation**

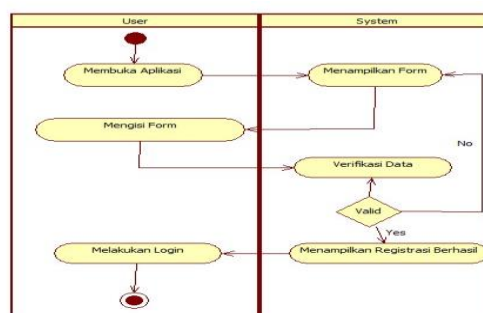
In building a laundry system that develops the E-Marketplace business model, the system is modeled in the form of UML. UML forms that will be used in this study are case diagrams and activity diagrams. Admin and Customers are actors in this photocopy system, Here uses a case diagram that is used to facilitate the actor and the relationship between use cases. The following is a picture of a use case diagram of the CopynCopy application system:



Picture 1. Use Case Diagram CopynCopy App

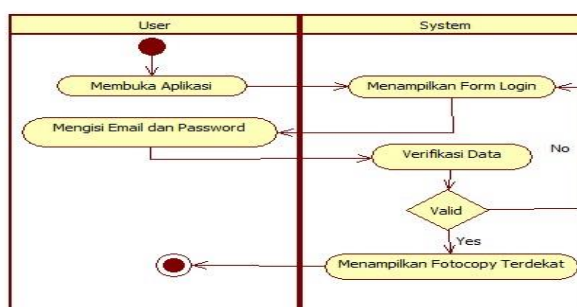
In the use case diagram of the CopynCopy application system, there are 10 use cases. Following is the activity diagram of the 10 use cases:

- Register  
The user first registers by filling out the form displayed by the system with accurate personal data. Then the data that has been filled in by the user will be verified by the system. If the data is verified by the system, the user can log in.



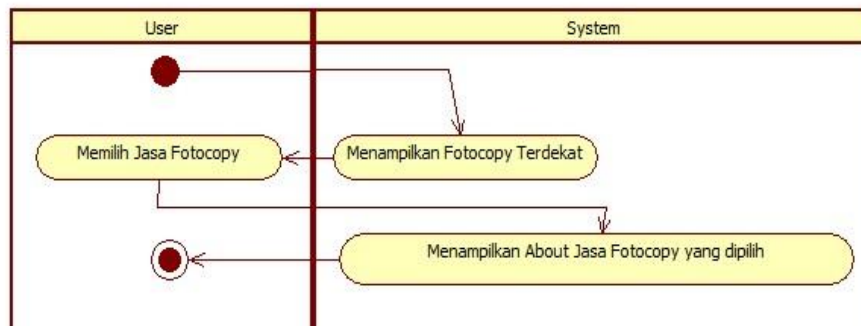
Picture 2. Activity Diagram Register

- Log in  
Users who have registered can log in by filling in their email and password. Then the e-mail and password will be verified by the system. If the e-mail and password match, the log in is successful and the user can enter the CopynCopy homepage.



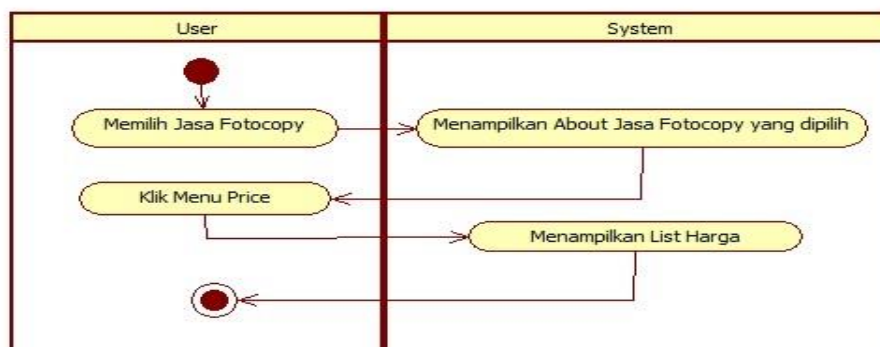
**Picture 3. Activity Diagram Log in**

- Select the Closest Copy Service  
After logging in, the user can see the closest copy that will be displayed on the homepage menu.



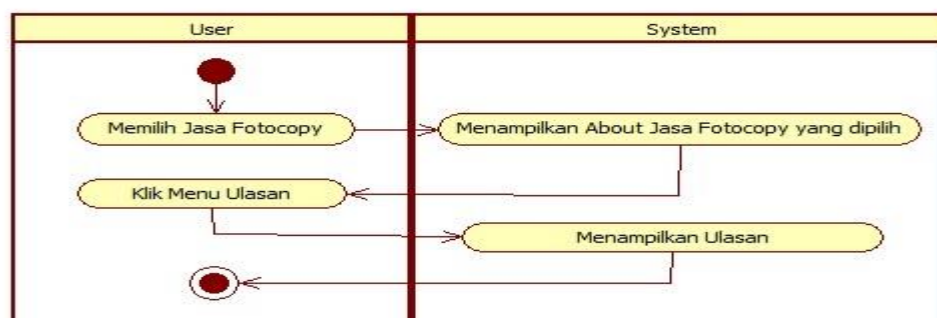
**Picture 4. Activity Diagram Select the Closest Copy Service**

- See List of Copy Service Prices  
To see the price list, the user can choose the photocopy service for the price list. After that, the system will display a description of the selected copy service with 3 menu features at the top. To see the price list, the user can choose the price menu.



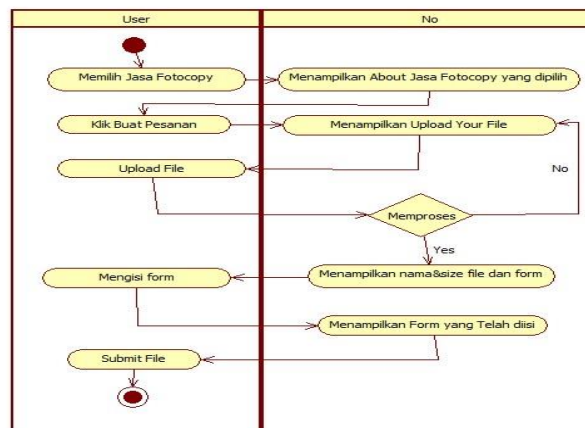
**Picture 5. Activity Diagram See List Copy Service Prices**

- See Copy Service Reviews  
To see a copy of a review of services, the user can choose the copy service. After that, the system will display a description of the selected copy service with 3 menu features at the top. To see reviews, users can choose the review menu.



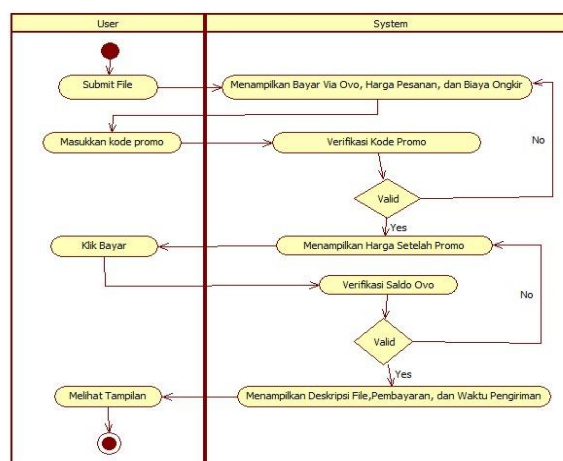
**Picture 6. Activity Diagram See Copy Service Reviews**

- Send File  
After selecting the required photocopy service, users can select the order menu. Then, the system will display your file upload, after which the user file will be processed by the system. If the file is successfully processed, the next step is to provide a form for delivery details.



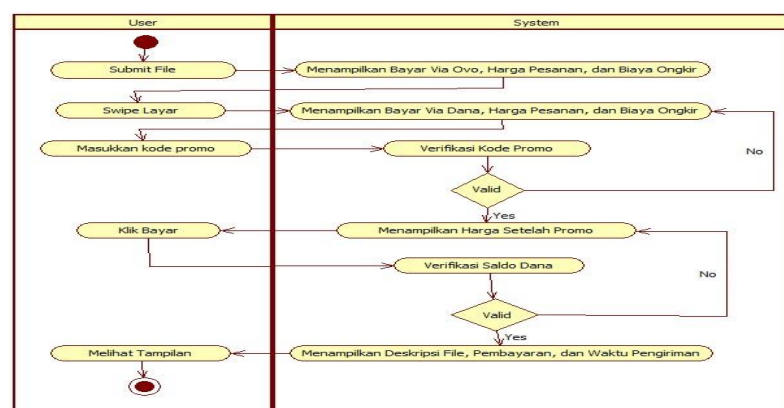
Picture 7. Activity Diagram Send Files

- **Ovo Payment**  
It can be done after the user fills in the form for order details and chooses payment via ovo.



Picture 8. Activity Diagram Ovo Payment

- **Dana Payment**  
It can be done after the user fills in the form for order details and chooses payment via dana.

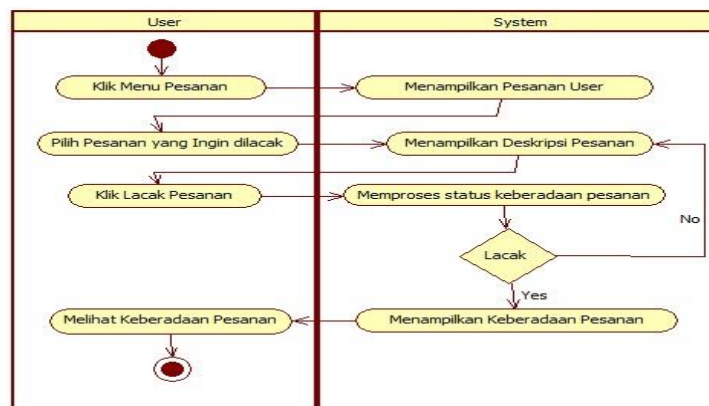


Picture 9. Activity Diagram Dana Payment

- **Track Orders**

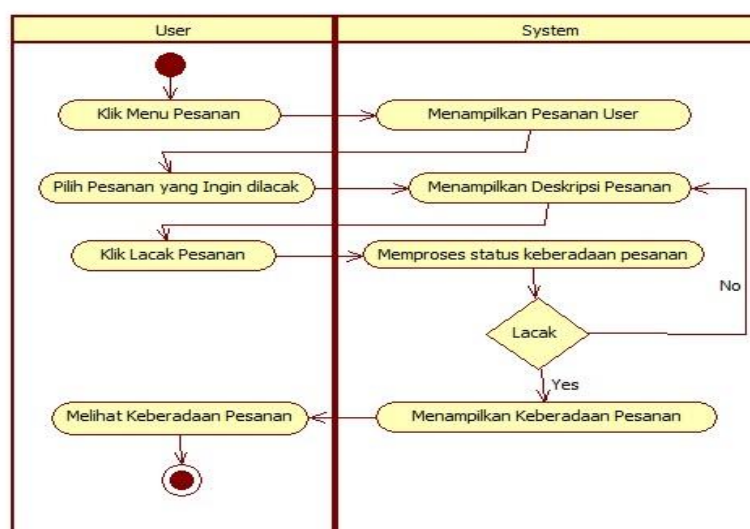


Users can choose the order menu that is displayed at the start. Then the system will display all user orders, the next thing the user needs to do is select the order that you want to track. The system will process the existence of user orders. If successfully processed, the system will display the presence of orders.



Picture 10. Activity Diagram Track Orders

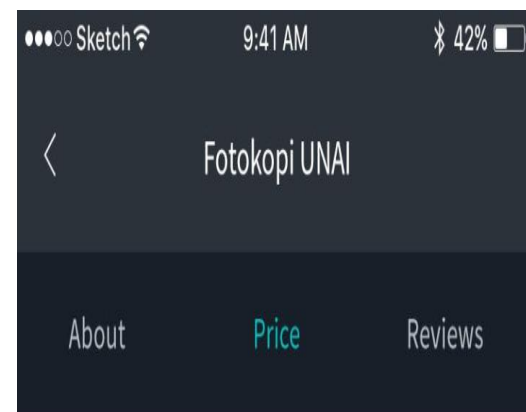
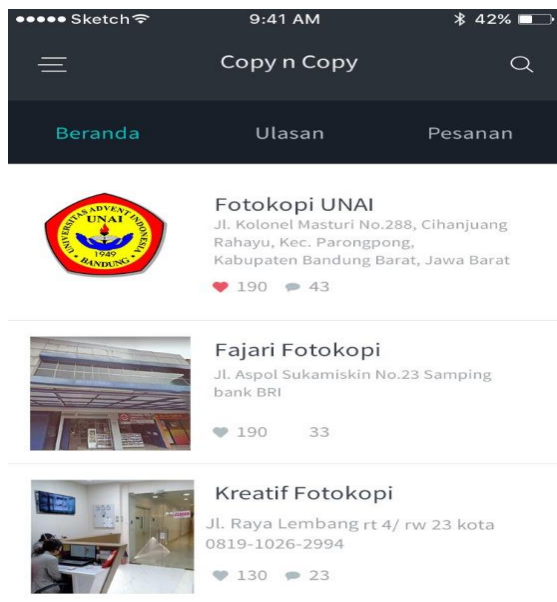
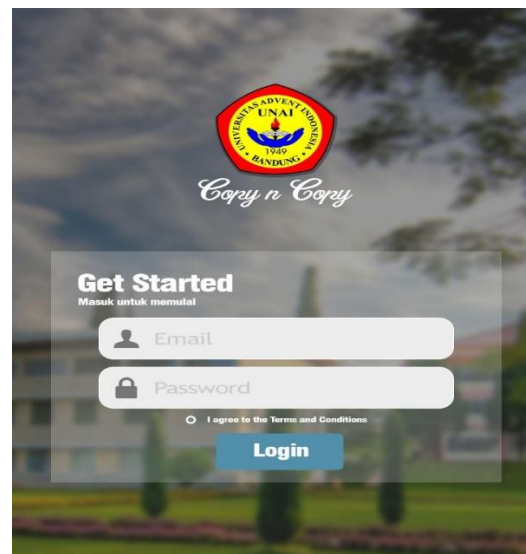
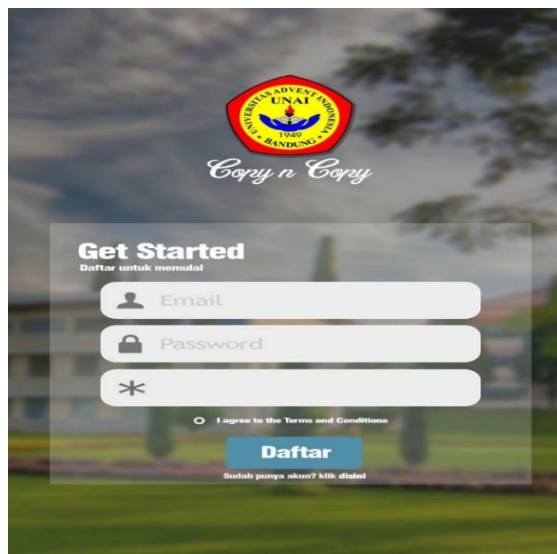
- Reviews**  
 To provide a review, the user must first place an order to the payment stage. Users can click on the order menu in the initial display, then select the order that they want to review. The system will display a review form that the user needs to fill in. When it's finished, the user can submit the review. User reviews will appear on the copy service review.



Picture 11. Activity Diagram Reviews

Display of Copy Service E-Marketplace Android-based System:



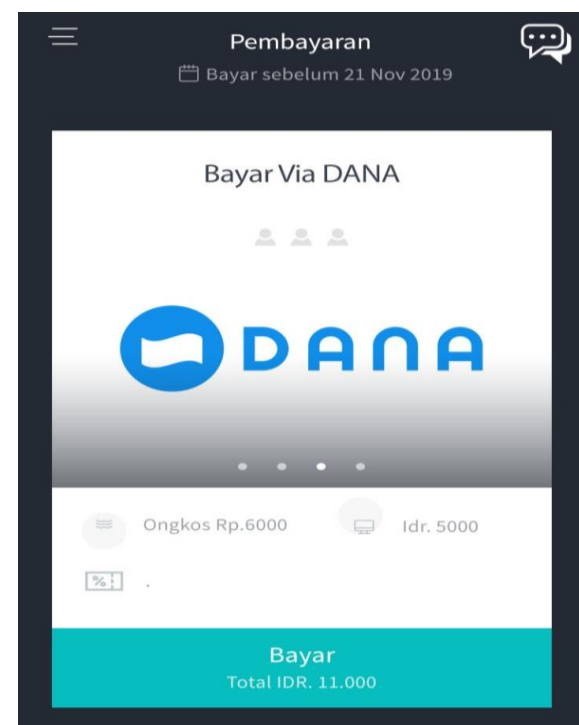
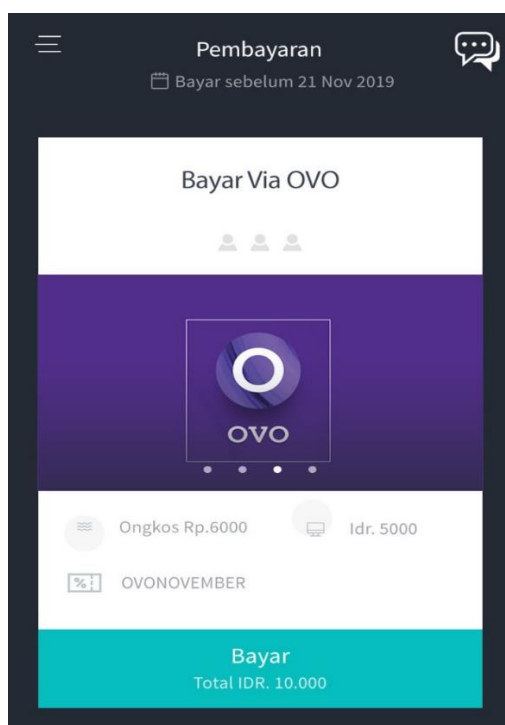
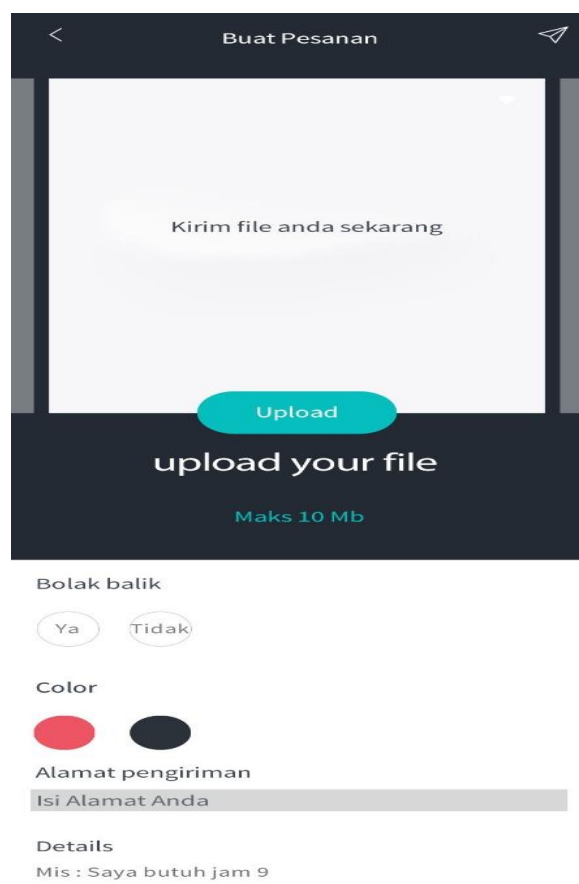
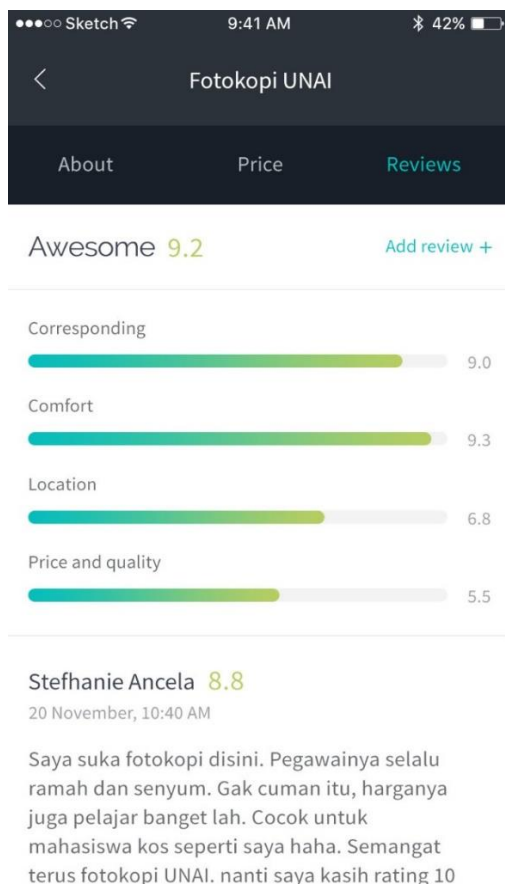


#### Daftar Harga

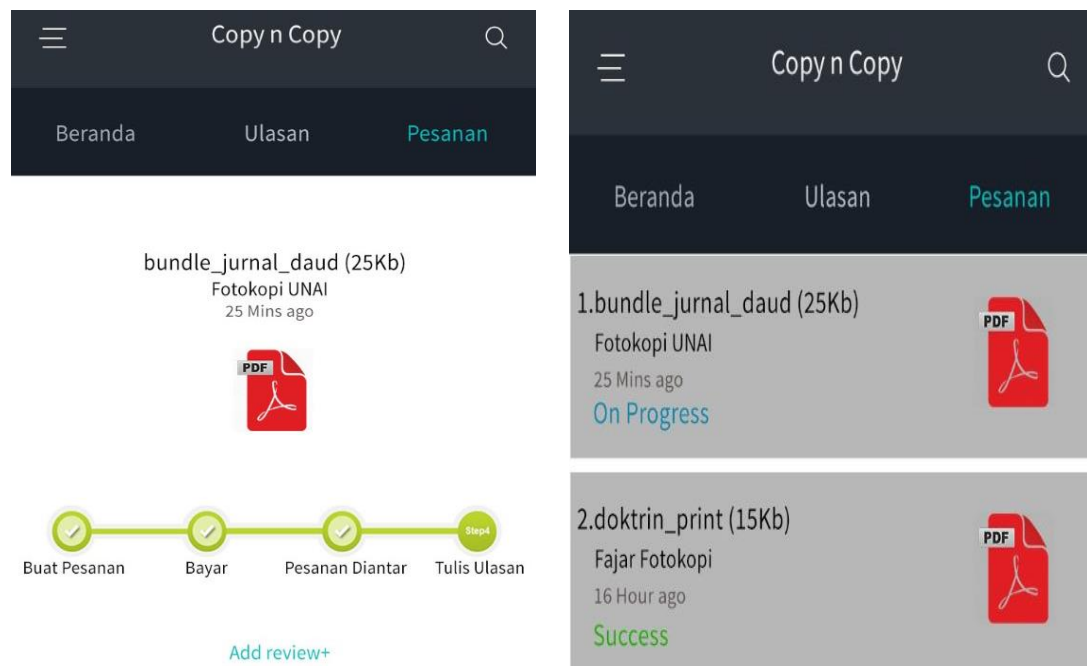
1. Print hitam putih Rp.250/lbr
2. Print berwarna Rp.500/lbr
3. Fotokopi hitam putih Rp.150/lbr
4. Fotokopi berwarna Rp.250/lbr
5. Jilid Rp.3000











#### 4. Conclusion

The e-marketplace in the field of selling product services can help business owners in conducting conventional business activities into digital business activities. One business model of service products are copy service. A large number of copy services in the Parangpong District has become the starting point in adopting the e-marketplace business model. With this business model, customers can easily find a copy service that suits their needs. The results of this study are the design of a copy service e-marketplace android-based system, which is expected to be used by copy service owners to promote their services and it is also expected to be used by consumers to order copy services.

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