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|  | **MINISTRY OF EDUCATION AND TRAINING** |

**FPT UNIVERSITY**

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| Capstone Project Document | |
| **Face Detection For Delivery Payment** | |
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– **Ho Chi Minh City, 20 January 2019** –

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**Definitions, Acronyms, and Abbreviations**

|  |  |
| --- | --- |
| Name | Definition |
| FDDF | Face Detection For Delivery Payment |

# Introduction

## Project Information

* Project name:  **Face Detection For Delivery Payment**
* Project Code: FDDP.
* Product Type: **Mobile Application.**
* Start Date: **January 05, 2019.**
* End Date: **--**

## Introduction

Nowadays, In the 4.0 generation we see the rising of millions ecommerce application, we can easily buy and sell something online, following that many kinds of payment solution have been created, such as online payment, COD payment, … If the application has a good payment solution, which help customers easier, safer and more interesting in paying for their product, then that business will grow up a lot faster.

In this document, we introduce a new payment solution for customer: a mobile application called FacePayment Solution (FPS). The FPS application will be a useful assistance to customer when they want to pay for their product through their face recognize. This document also describes our working process in 4 months including our perspective on the system, component designs and detailed core workflows.

## Current Situation

Vietnamese people are more and more shopping through social networks at the rate of 70% in 2018 compared to 66% of the same period last year. Research by Q & Me shows that shopping on social networks offers more fun while e-commerce floors offer better prices and faster delivery times.

According to Vietnam e-commerce report in 2018, which has been announced by market research company Q & Me on November 28, cash is still the main payment method of Vietnamese people when shopping online, with 80% of people asked which form of payment they usually use on delivery choose COD. Forms such as payment cards, e-wallets, and transfers only account for 8%, 6% and 5% respectively.

## Problem Definition

Below are the disadvantages of the current payment solutions:

* In COD payment, when shippers deliver products to customers, there might be potential issues:
* Shippers might not return cash to the company.
* Shippers receive wrong amount of oney.
* Customers might be fake.
* Payment cards, e-wallets, and transfers account for a smaller percentage, only 20%.
* Policies to ensure online shopping and protect buyer rights are still very lax, cases of customers being scammed, paid and not delivered, delivered wrong goods, fake goods, poor quality goods, damaged during transportation.
* Consumers still have not enough time to adapt and change habits payment online.
* The shop owner is not active, only 7.6% of the website integrates online payment facilities, the remaining 92.4% are not integrated for many reasons.

Above payment problems may reduce the effectiveness of product sale, business’s trademark.

## Proposed Solution

Build a Mobile application to support payment when shippers deliver products. It helps create new payment solution through face recognize function. The following workflow and features should be implemented:

### **5.1 Feature functions**

* + Create booking and receive booking system for customer and shipper.
  + Using Face recognize method to pay for order.

### **Advantages and disadvantages**

The advantages and disadvantages of the proposed solution:

* **Advantages**:
* Overcome inherent weaknesses of traditional COD form…
* Taking advantage of COD, Customers can view products before paying, reinforcing trust.
* Quick and convenient payment with relatively high reliability.
* **Disadvantages**:
* There may be problems identifying twins.

## Functional Requirements

Function requirements of the system are listed as below:

**6.1 Customer Application:**

+ Registration, add Face, National ID.

+ Login.

+ Buy products, book shipper.

+ Track ride: Tracking rider location real time.

+ Estimate: Location, time, distance and money customer have to pay.

+ Face detection payment.

+ Check driver’s information.

+ Cancel order.

**6.2 Driver Application:**

+ Login.

+ Receive customer booking.

+ Routing for driver real time.

+ Target define extra earning (optional).

+ Cancel shipping (2 minutes).

**6.3 Web Administration Application**

+ Approve face for payment method.

+ Report revenue.

+ Driver and User manager.

+ Orders manager.

## Role & Responsibility

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
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Table 1: Roles and Responsibilities