1. **Report No.1 Introduction**
2. **Project Information**
3. **Introduction**
4. **Current Situation**
5. **Problem Definition**
6. **Proposed Solution**

The proposed solution is to build an insurance NFC card system, include a web application and 2 mobile applications with following functions:

**5.1 Feature functions:**

* Center system(web application):

+ Register insurance: user can register a new insurance card with on website using online payment. A staff will contact the user to create contract and send an insurance NFC card to him/her. If users already have a NFC card, they can use the website to renew current contract.

+ Check card information: user can login into the website and check for their card’s information.

+ Request compensation: user can fill data into the sample fields and send compensation request to the company.

+ Make/manage contracts: staff can make and manage contracts.

+ Resolve compensation: staff can receive and resolve compensation requests.

+ Notify contract state: system will send an email to notify the insured one when their insurance is expired.

+ Notify compensation state: system will send an email to info the insured one when their compensation were accepted or rejected.

* Insurance card printer (mobile app):

+ Simulating NFC card printer: staff can print NFC card.

* Insurance card checker (mobile app):

+ Check card: traffic police and Police Department can check specified motor insurance card expired or not.

+ Update the punishment of violator: traffic police and Police Department can update the punishment of violator to the card information.

**5.2 Advantages and disadvantages:**

* Advantages:

+ The interaction between the insured one and the insurance company: the insured one and the company now are easier to communicate through the website when each person has an account.

+ Reduce risk of insurance card made of paper: the NFC insurance card will not be torn, wet or smudged. And it is difficult to be counterfeit than insurance card made of paper.

+ Support police to check valid insurance card easier.

* Disadvantages:

+ The fees are high includes NFC cards, android devices.

+ At the present time, not consistent with the law of Vietnam about insurance card issues.

1. **Functional Requirements**

Function requirements of the system are listed as below:

* 1. **User component:**
* Check card information.
* Renew contract.
* Request compensation.
  1. **Staff component**
* Make and manage contracts.
* Resolve compensation requests.
  1. **Checker mobile application**
* Check card validation.
* Update punishment information.
* Retrieve card information.
  1. **Printer mobile application**
* Print NFC insurance card.
  1. **Notify component**
* Notify contract expiration.
* Notify compensation states (approved / rejected).

1. **Role and Responsibility**