# **Project Report** iCT Multi-platform Flashcard software for learning English

#### **COURSE: SOFTWARE ENGINEERING**

- GROUP X: Bùi Thị Phương Anh
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### **OUTLINE**

- 1. Overview
- 2. Analysis and Design
- 3. Software
- Implementation/Coding
- 4. Testing & Document
- 5. Teamwork
- 6. Final result

## 1.OVERVIEW

#### **Flashcard**

=> A method to learn English that combine the word, pronunciation and the image data so that people can learn more easily.

#### iCT Flashcard

- => PROVIDE **VISUAL FLASHCARDS**: we don't have to buy paper flashcard anymore.
  - => LEARN **EVERYWHERE**: we can use both web app and Desktop app to learn.
  - => **MULTIPLE LANGUAGE** SUPPORT: user can choose to use Vietnamese or English language UI.

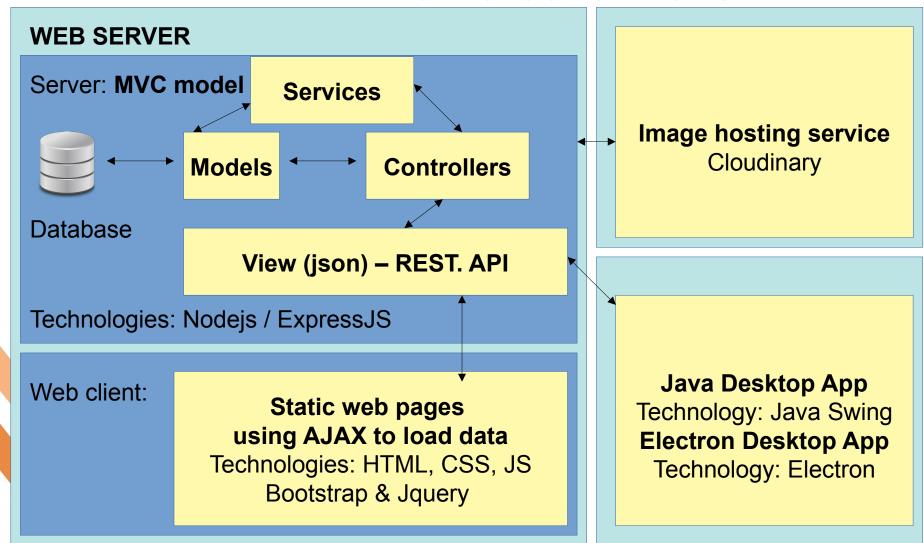
# 2.ANALYSIS AND DESIGN

#### **PROGRESS:**

- → 1. Requirement definition (in design document)
- → 2. Design Diagrams (in design document)
- → 3. System architecture design
- → 4. Technology selection

# 2.ANALYSIS AND DESIGN SYSTEMA

# SYSTEM ARCHITECTURE AND TECHNOLOGY SELECTION



# 3.SOFTWARE IMPLEMENTATION / CODING

- TOOLS USED IN MY TEAM:
  - + Server / Web:

VS Code, Sublime text

- + Java desktop app: Eclipse
- + Electron desktop app: Nodejs CLI
- + Team communication:

Facebook Messenger

+ Source Version Control:

Microsoft Github

- + Testing:
  - Postman test script

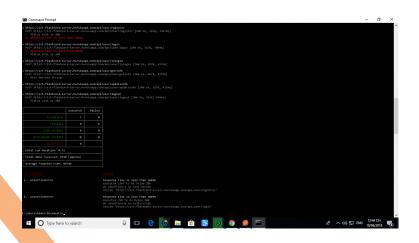


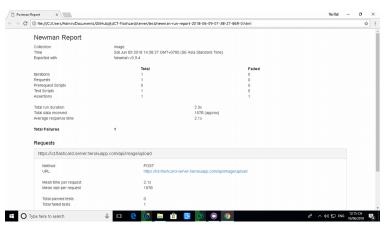
# 4. TESTING & DOCUMENTS

#### **TESTING**

- Use Postman Test scripts to test web APIs.







Run test via console

Create web pages as report

# 4. TESTING & DOCUMENTS

#### **DOCUMENTS**

- DESIGN DOCUMENT:

https://github.com/vietanhdev/ iCT-Flashcard/blob/master/doc s/DesignDoc.pdf

- DOCUMENT PAGE FOR DEVELOPER:

https://ict-flashcard-server.herokuapp.com/for-developer/



### **5.TEAMWORK**

1. SOURCE VERSION CONTROL : GIT Github Address:

https://github.com/vietanhdev/iCT-Flashcard

2. TEAM COMMUNICATION: Facebook Messenger Group

## 5.TEAMWORK

### Collaboration is done using github.

#### **WEB SERVER**

#### Thoa:

- Design the base structure
- Design database
- MVC model
- Manage images

#### VietAnh:

- Implement Restful APIs
- Create dictionary database

#### Phong:

- HTML layouting
- About pages

#### VietAnh:

Webpage design / Logic code for client

Thoa:

#### **DESKTOP APP**

#### PhuongAnh:

- Design and implement Java desktop app

#### Hai:

- Create initial layouting for desktop app
- Flashcard displaying

#### VietAnh:

- Electron desktop app (desktop app based on web technologies)

- Implement multiple-language.

#### **TESTING &DOCUMENT**

#### Hai:

- Write test script using Postman script

#### All team:

- Design general structure and UMLs

#### VietAnh:

- Create DesignDocument from available diagrams.
- Create slides for presentation.

#### Phong:

 Make document page for developer.

#### Thoa:

Webpage testing

#### **PhuongAnh**

Desktop app testing

#### **WEB - CLIENT SIDE**

## **6.FINAL RESULT**

#### Webpage

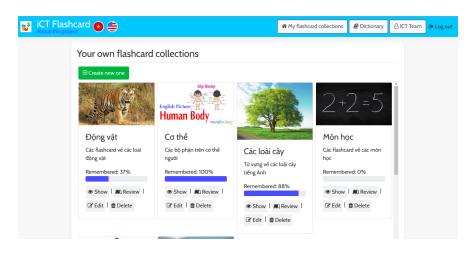
app: Heroku;

database: CleverCloud;

image: Cloudinary

https://ict-flashcard-serve

r.herokuapp.com/





#### PC Apps (2 versions):

Java Desktop App: Optimize the speed

https://github.com/vietanhdev/iCT-Flashcard/tree/master/pc

Election Desktop App: UI looks like web app. Save internet data.

https://github.com/vietanhdev/iCT-Flashcard/tree/master/pc-lite

# **6.FINAL RESULT**

# Demo



Q&A

# THANK YOU YOUR ATTENTION!