Санкт-Петербургский Национальный Исследовательский Университет Информационных Технологий, Механики и Оптики

ФКТиУ, кафедра Вычислительной техники

Лабораторная работа №2 по дисциплине «ПРОЕКТИРОВАНИЕ ВЫЧИСЛИТЕЛЬНЫХ СИСТЕМ»

Выполнил: Р3400 Ле Туан Зунг

Р3410 Нгу Фыонг Ань

Преподаватель:

Пенской Александр Владимирович

Санкт-Петербург 2020 г.

Purpose

documentation and design of architecture of computing systems.

architectural problems

1: method save all data in database

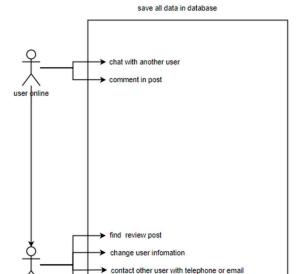
2: method save data with cache

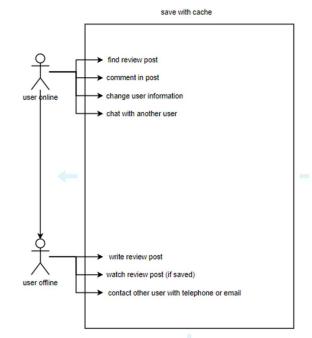
3: method payment : promo code for each product

4: method payment : promo code for all product

5: database for bigger project

6: database for simple project



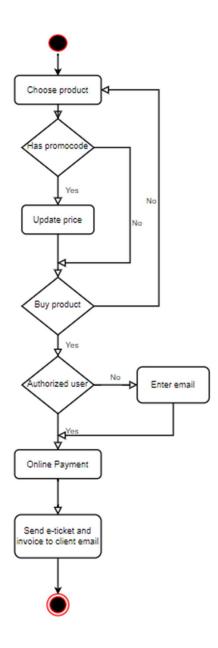


- +The application functions as much as possible even in offline mode
- + All user data can be changed in locally (your posts, personal data, ...)

write review post

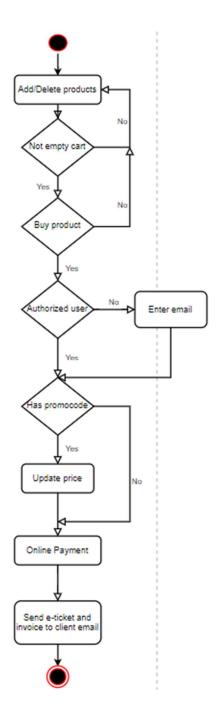
- Heavy load on the device -complicated in implementation

- + Ease of implementation
- + Less load on the device
- Minimal functionality offline

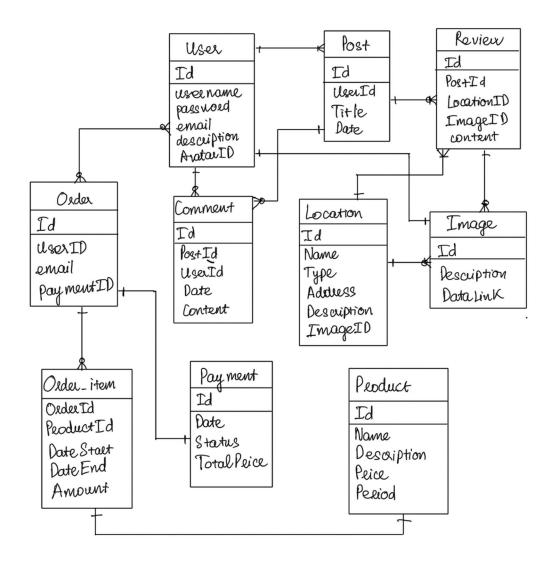




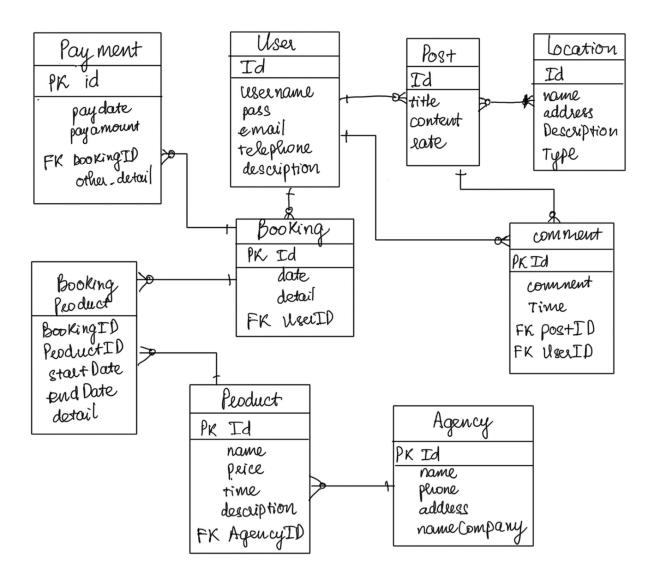
- + Easy for to implement and manage products + Users can immediately know the price they have to pay if they have discount codes
 - inconvenient for users: each user only can buy 1 product per payment



- Harder for to implement and manage products since each product is attach with another company
- + Users can buy many products with just 1 payment
- + System will automatically find the best deal for the discount code

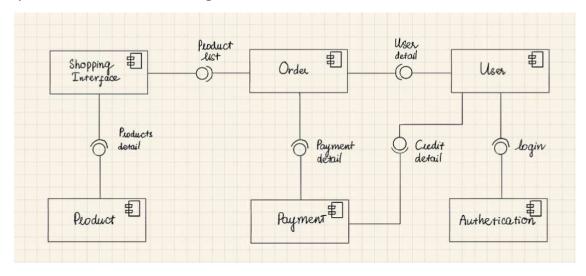


- + Can proactively fix the problem without contact / dependence on third party databases.
- + Avoid user data leakage.
- + When a user creates a post, which consists of many reviews, those reviews will be displayed directly under the Location's description page.
- High cost for both storage and operation

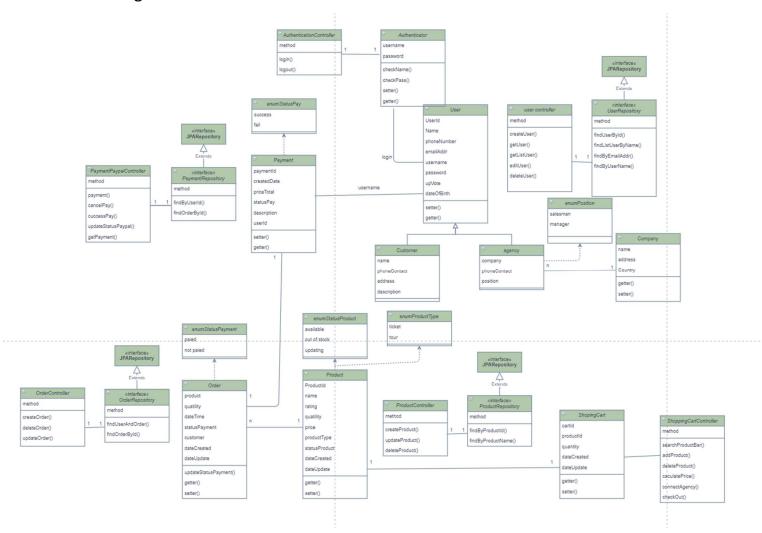


- + Simple for implement.
- + Cost savings (data is not large in size, images and videos can be saved in an open cloud data of 3rd party).
- + Provide a separate account for the service provider.
- poor in terms of content .
- a payment only buys one product.

Component and interface diagrams



Class diagram



Dataflow diagrams

