ENCA not Cleaning Agent— a cleaning agent picker

Agenda

- Introduction (Haoze Zhang)
- Business Logic Structure (Zhaowen Gong)
- Data Access and Testing (Zeling Wu)
- Android application (Xiaoqi Ma)
- Demo

Team

Haoze Zhang

Requirement analysis, system structure, UI design and team collaboration.

Zhaowen Gong

Business logic implementation, UI implementation and code revision.

Zeling Wu

Data acquisition, database management and testing.

Xiaoqi Ma

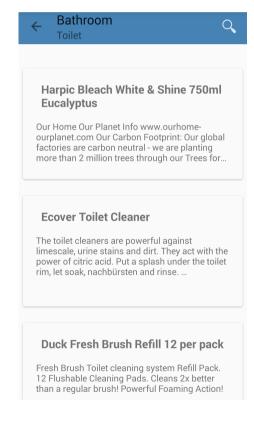
Android application, UI design and implementation.

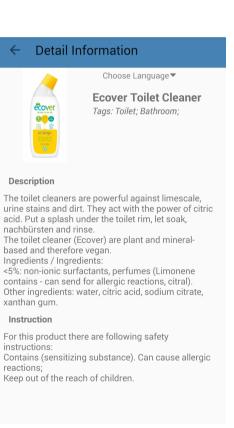
Collaboration platform:

GitHub: https://github.com/Nimita311/ENCA-Andriod

Additional Task

Android:ENCA express

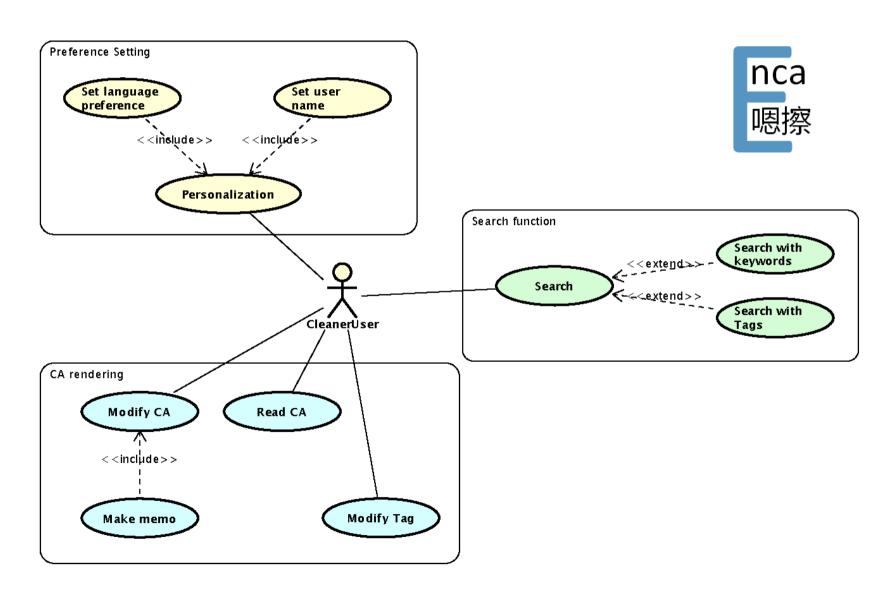




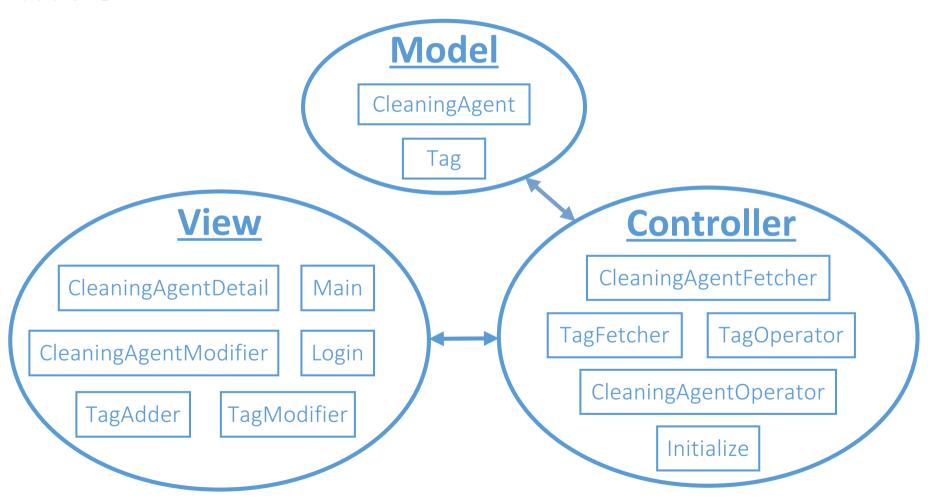
Scenarios of Use

- Scenario 1: (with ENCA)
 Cleaning purpose -> Cleaning agent
- Scenario 2: (with ENCA)
 Cleaning agent's name or description -> Cleaning agent
- Scenario 3: (with ENCA-express)
 Want to buy a cleaning agent -> show the seller

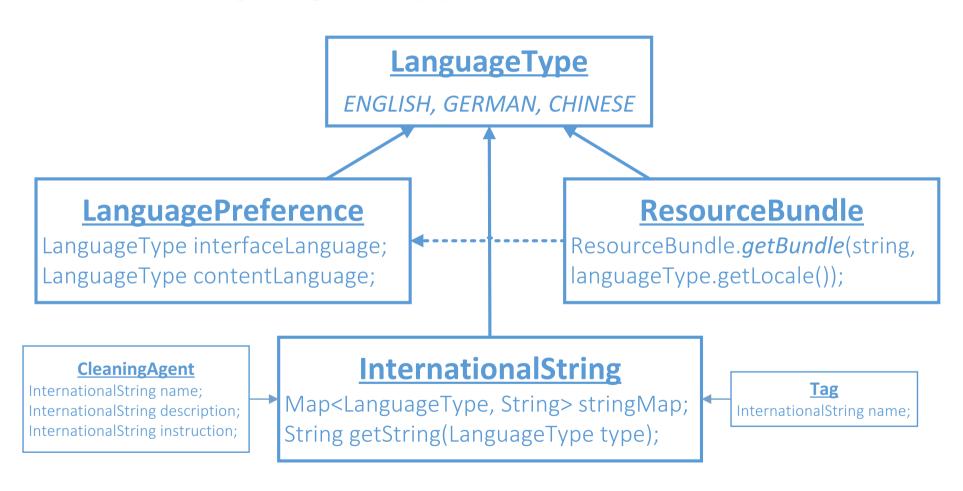
Use Cases



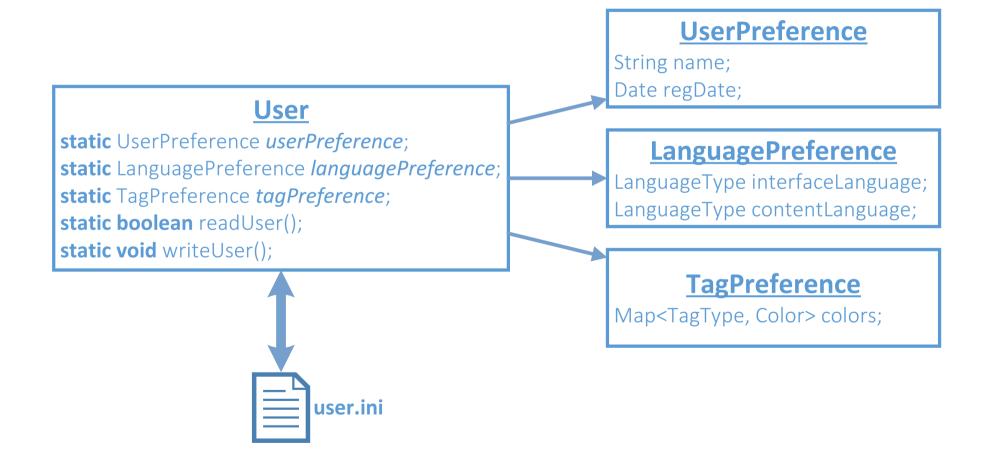
Business Logic Structure MVC



Business Logic Structure Multi-Language Support



Business Logic Structure Preferences

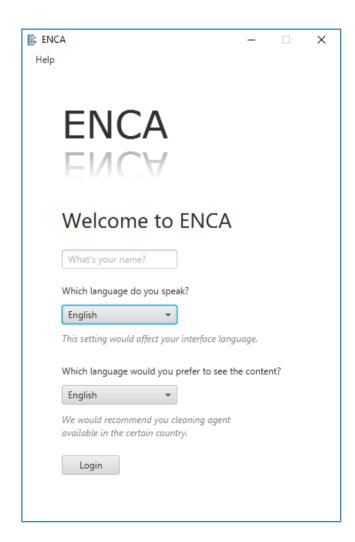


GUI Design

- JavaFX structure
 - Main class
 - FXML file expressing interface
 - Separate controller
 - css file controlling style
- More flexible layout
- Better look
 - Flat design
 - Primary color: Steel Blue, RGB(70, 130, 180)
 - Secondary colors: Room

Others

Consistency



Data Access Logic

SQLAmender

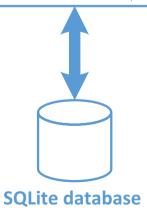
static void createCleaningAgent(CleaningAgent cleaningAgent);
static void modifyCleaningAgent(CleaningAgent cleaningAgent);
static void removeCleaningAgent(CleaningAgent cleaningAgent);
static void createTag(Tag tag);
static void modifyTag(Tag tag);
static void removeTag(Tag tag);

SQLVisitor

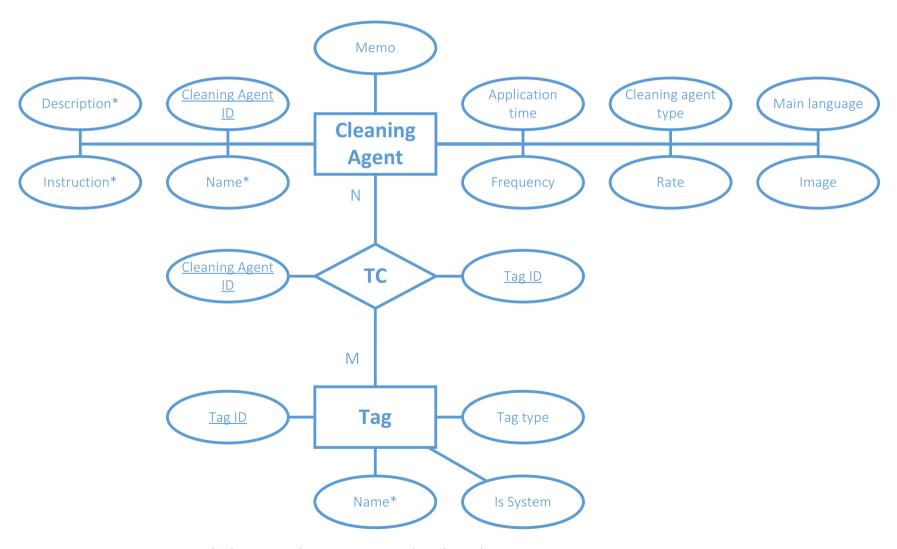
static ResultSet visitCleaningAgentsAll();
static ResultSet visitTagsAll();
static ResultSet visitRelations();
static ResultSet visitImage(int cleaningAgentID);

Connector

static Connection connection;
static void connect();
static ResultSet executeSelect(String sql);
static void executeNonSelect(String sql);



Entity Relation



^{*} Those attributes are stored in three languages.

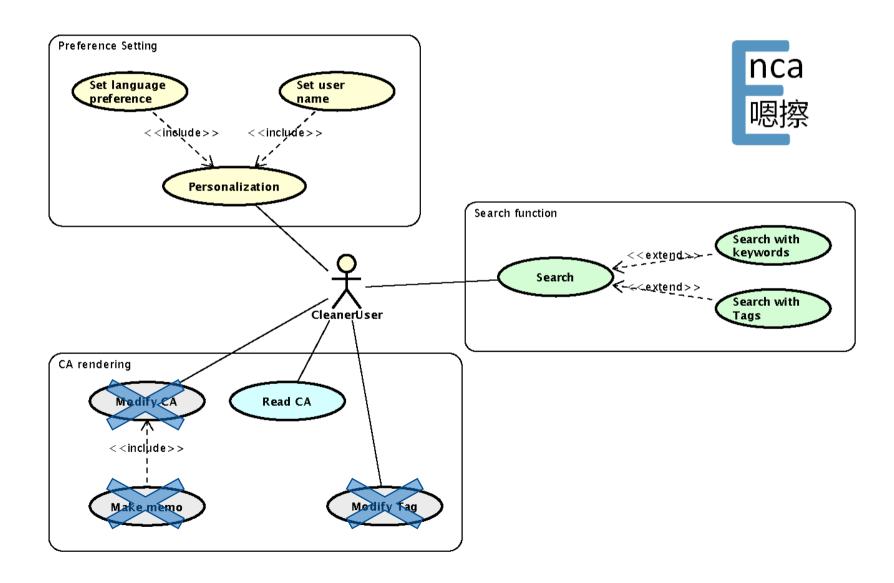
Test

Unit Test
 InternationalStringTest

Module Test
 SQLAmenderTest, SQLVisitorTest

Integration Test
 TagOperatorTest

Android Use case



Demo

ENCA-express

ENCA