

W25 PROGRAMMING PROJECT

SCENARIO

The *KOLECHIAN FOREIGN INTELLIGENCE SYSTEM*, is a simple software program that allows HANDLERS and AGENTS alike to be more organized in their work. As such, mission details such as location, objective, difficulty and status can easily be looked up with the program.

The HANDLERS are responsible for mission control, they will be able to assign or cancel missions for their AGENTS. The HANDLERS are able to access a database where they can view mission statuses and the performance of various AGENTS.

AGENTS on the other hand can use the program to access their mission details, they can mark missions as completed as well. They are also provided with a database of their own except it only displays their mission history.

DESIGN PARADIGM

The system provides different services depending on the user type.

- HANDLERS

- Add new mission to database
- Assign mission to AGENTS
- Cancel mission
- View the mission database
- View a list of active missions
- View all AGENTS performance statistics
 - # Missions assigned
 - # Missions completed
- Export database or statistics to a separate file

- AGENTS

- View assigned missions
- Complete mission

- View own mission history
- View own performance statistics
 - # Missions assigned
 - # Missions completed
- Export mission history or statistics to a separate file

EXPECTED OUTPUT

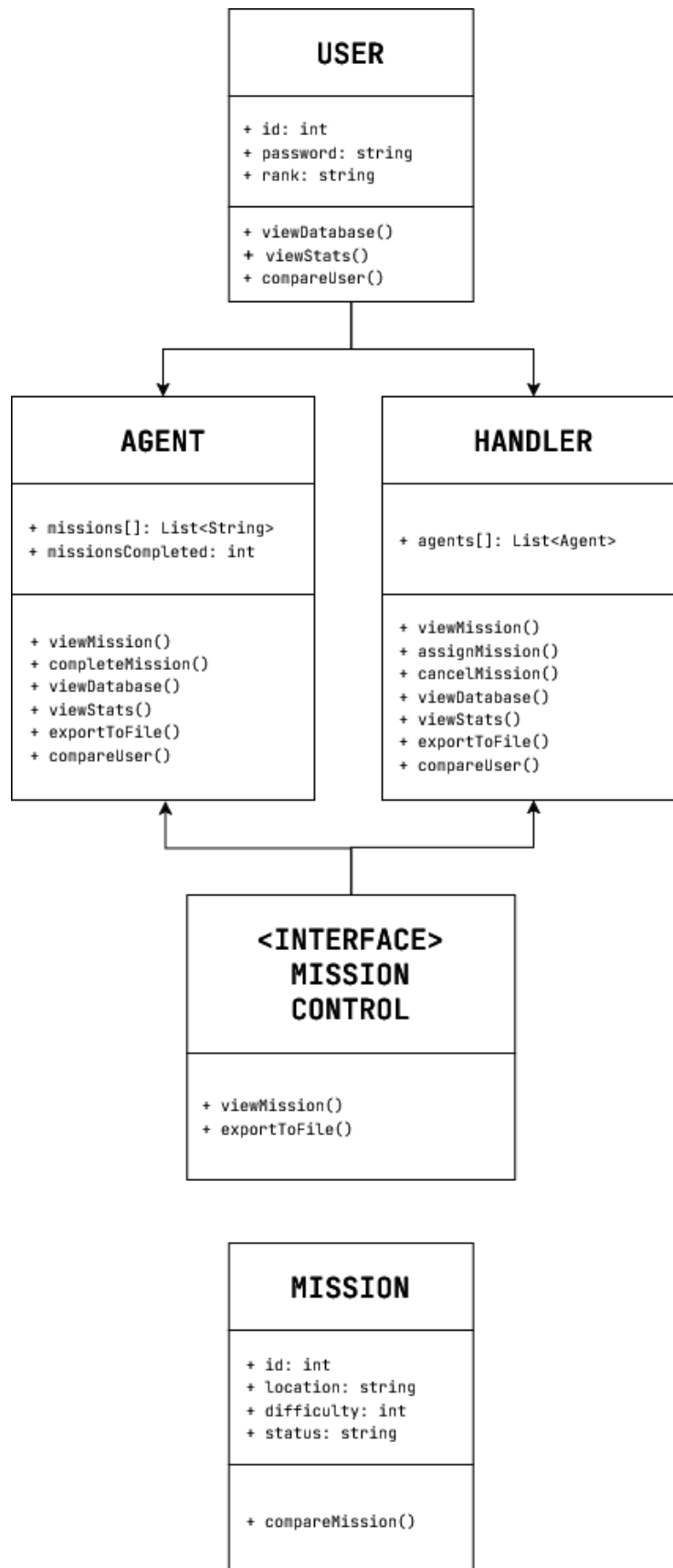
The system will be able to display information requested by the USER such as statistics and mission information in the console.

PROJECT SPECIFICATIONS

Here are some specifications on what will be implemented in the project.

- **HIERARCHIES**
 - USER Hierarchy
 - HANDLERS
 - AGENTS
 - MISSION Hierarchy
 - Active Missions
 - Completed Missions
- **INTERFACES** : Mission Control
 - Can be used by HANDLERS to assign/cancel missions
 - Can be used by AGENTS to view and complete missions
- **POLYMORPHISM** : USER hierarchy
 - viewDatabase(): Usable by both HANDLERS and AGENTS once overridden
 - viewStats(): Usable by both HANDLERS and AGENTS once overridden
- **TEXT IO** : GUI/Console Interface class
 - Can be used to display database and statistics when requested
- **COMPARABLE/COMPARATOR**
 - Can be used to compare AGENT statistics from the database
 - Can be used to compare mission difficulty

CLASS DIAGRAM



PROPOSED PROGRESS FOR DELIVERABLE 2

- USER Hierarchy
 - USER
 - HANDLER Class
 - AGENT Class
 - completeMission()
 - assignMission()
 - cancelMission()
- Mission Class
 - compareMission()