# PROPOSAL

## Tools and resources

* Programming language: Java
* Database management system: MySQL

## Tasks of the android local ticketing system

### Creating the basic outline of the android local ticketing system

Using Java with Netbeans IDE, we create a basic outline and interface of Android local ticketing system. Our project will include 3 different application: “admin”, “ticket-checker”, “user”.

### Designing & developing the database system for Android local ticketing system

Our group decided to use MySQL to manage the database of this system. In this task, we will design and develop the database system including User Detail (user ID, password, name, address, age, sex, mobile phone number, photo, balance); Ticket Detail (ticket ID, to, from, type, date, RS); User’s Balance ( user ID, balance, card number, CVV number, amount); Ticket Collector ( ID, password); Admin ( admin ID, password).

### Building “View My Detail” functionality (as User)

Users can view their information including, user ID, name, address, age, mobile phone number, balance. However, they cannot edit the information.

### Building “Book and view ticket” functionality (as User)

The user can choose the time, the destination, the journey type and can view the total price. Then, they can book the ticket by their balance. By choosing view ticket and input the ticket ID, the user can see all of their ticket booked.

### Building “Add balance” functionality (as User)

This function can help the user add balance by using their credit card. The user can also input the card number, CVV number and the amount they want to add. The amount will be directly sent to their account.

### Building “Login & Logout” functionality (as User)

This is required if the users want to book the ticket. After registering their account for the first time at the station by admin, they will receive the user ID and the password to login their account. The user can also use their ID and password to login the system for booking ticket. After that, they can logout.

### Building “View ticket detail” functionality (as Ticket-collector)

The collector can login to check the ticket information by inputting their ticket collector ID and password. Then, they can input the ticket ID to search and view all the information of the user’s ticket. They also can clear that information when the user gets on the train.

### Building “Add the user” functionality (as Admin)

The admin role can add the user by using the user’s information (name, address, age, sex, mobile phone number, photo, balance). The user’s ID can automatically be updated in the admin system.

### Building “Add balance and view transaction” functionality (as Admin)

The admin can directly recharge the user’s balance after inputting the user ID, the amount that the user wants to add. Besides, the user can see the transaction of all the ticket in the specific period of time.

## Timeline

### Week 1 Creating the basic outline of the Android local ticketing system.

|  |  |
| --- | --- |
| Tasks | Member |
| Attend group meetings for planning & setting up | All members |
| Decide necessary system information (field of train system, name of locations, the distance, database, ...) | All members |
| Decide the main color palette. | All members |
| Attend group meetings for reviewing and planning | All members |

### Week 2 Designing & developing the database system

|  |  |
| --- | --- |
| Tasks | Member |
| Analyze & list the types of information that need to be stored in the database | Hoang Thinh & Huynh Giao |
| Design & define the tables and relationships | Gia Phuc, Duyen Anh & Hong Dang |
| Sync & demo database | All members |
| Attend group meetings for reviewing and planning | All members |

### Week 3 Building “Add the user & Login & Log out” functionality (as Admin)

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| --- | --- |
| Tasks | Member |
| Research, analyze the requirement and define a concept of function | All members |
| Design interface for the function | Gia Phuc |
| Develop “Add the user & Login & Log out” functions |
| Design and integrate data into the database | Hong Dang |
| Test function, database |
| Attend group meetings for reviewing and planning | All members |

### Week 4 Building “Add balance and view transaction ” functionality (as Admin)

|  |  |
| --- | --- |
| Tasks | Member |
| Research, analyze the requirement and define a concept of function | All members |
| Design interface for functions | Hong Dang |
| Develop “Add balance and view transaction” functions |
| Design and integrate data into the database | Gia Phuc |
| Test function, database |
| Attend group meetings for reviewing and planning | All members |

### Week 5 Building “View My Detail & Login” functionality (as User)

|  |  |
| --- | --- |
| Tasks | Member |
| Research, analyze the requirement and define a concept of function | All members |
| Design interface for functions | Hoang Thinh |
| Develop “View My Detail & Login” functions |
| Design and integrate data into the database | Huynh Giao |
| Test function, database |
| Attend group meetings for reviewing and planning | All members |

### Week 6 Building “Book and view ticket” functionality (as User)

|  |  |
| --- | --- |
| Tasks | Member |
| Research, analyze the requirement and define a concept of function | All members |
| Design interface for functions | Huynh Giao |
| Develop “Book and view ticket” functions |
| Design and integrate data into the database | Hoang Thinh |
| Test function, database |
| Attend group meetings for reviewing and planning | All members |

### Week 7 Building “ Add balance & Logout” functionality (as User)

|  |  |
| --- | --- |
| Tasks | Member |
| Research, analyze the requirement and define a concept of function | All members |
| Design interface for functions | Huynh Giao |
| Develop “Add balance & Logout” functions |
| Design and integrate data into the database | Duyen Anh |
| Test function, database |
| Attend group meetings for reviewing and planning | All members |

### Week 8 Building “ View ticket detail & Login & Logout” functionality (as Ticket-collector )

|  |  |
| --- | --- |
| Tasks | Member |
| Research, analyze the requirement and define a concept of function | All members |
| Design interface for functions | Duyen Anh |
| Develop “View ticket detail & Login & Logout” functions |
| Design and integrate data into the database | Hoang Thinh |
| Test function, database |
| Attend group meetings for reviewing and planning | All members |

### Week 9 Final testing application, completing all documents

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| --- | --- |
| Tasks | Member |
| Detect errors of the system. | Huynh Giao & Hoang Thinh |
| Debug and optimize functions | Hong Dang |
| Final test and demo all functions of the system | Gia Phuc |
| Complete all the required documents (final report, ...) and slides | Duyen Anh |
| Attend final group meetings for reviewing. | All members |