



Telco – A Project Management Tool

Requirements Specification Document

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General Description

FiberNow, a telecommunication infrastructure company, within the framework of its operation, needs a web application that will enable the employees - managers of its platform to have access to information concerning customers, applications of new installations, and reports of problems. The applications and reports are tagged with a single-name ticket. The web application will also enable the customers to oversee the status of their ticket.

Roles of users in the application

Two kinds (roles) of users are available in this web application:

- Admin (**Employee of the Company**)
- Customer

Functional requirements

Login Page

The user will enter their email and password and depending on their type/role, will be redirected to one of the following views (pages)

- A. Administrator Home Page
- B. Customer Home Page

A. The Admin View

Admin Home Page

The **administrator homepage** should display the next 10 pending tickets, based on the day and time that will be set. Also, it will allow administrators to navigate to the following pages:

1. Customers Home Page (admin view)
2. Tickets Home Page (admin view)

1. Customers Home Page (admin view)

For customer management the admin view will be able to:

- Create a customer with the corresponding form (create-customer page)
- Access the customer data processing page. Stylistically this will look like creating a customer, but the fields will be pre-filled. In addition, there will be a button, which when pressed, will delete the corresponding customer. (Edit-customer page)
- Access the customer search page: This will have a form with the search criteria mentioned and below it a table with the results (initially the table will be empty on the 1st visit to the page) (search-customer page). The Update and Delete options can be found next to the search results for each customer.

More specifically:

Create-customer-page

A form will appear with the following fields:

- TAX number (AΦM), which is a unique identifier that characterizes customers
- Name, Surname
- Address

- Phone number(s)
- Email(s)
- Username and password

Edit-customer page

On this page, the complete details of the customer will be displayed, and the administrator will be able to modify them. The navigation on the page can be done with a corresponding link on the search page.

Search-customer page

It will contain the following fields for search:

- TAX number
- email

Delete-customer- page

Through the update page, a special button will be provided that will allow the delete function. It is recommended to press the JavaScript window to confirm the action at the touch of a button.

2. Tickets Home Page (admin view)

The corresponding pages for the tickets are defined in the same way. Specifically:

- Create-ticket page
- Edit-ticket page
- Search-ticket page

More specifically:

Create-ticket-page

- Date the ticket was received
- Customer
- Date (date and time) of the scheduled action (installation or repair)
- Status of the ticket (Pending, In progress and Complete – default: Standby mode)
- Type of ticket (New installation, broken line, limited connectivity)
- Estimated Cost
- Address of installation/damage
- Description as a free-text field for the work that needs to be done (e.g., installation of a new line, fiber to the home etc.).

Edit-ticket-page

As in the Customer page, where it will be possible for the admin to update the ticket details (e.g., status)

Search tickets page

It will contain the following fields for search:

- Date or Range of dates
- Customer ID, in case we want to display all the tickets made.

Delete ticket page

Through the update page, a special button will be provided that will allow the delete function. It is recommended to press the JavaScript window to confirm the action at the touch of a button.

B. The customer Home Page (Customers View)

The **homepage** of an ordinary user should show only the tickets that concern them. Also, it will allow customers to navigate to the following pages:

- Customers Home Page (customer view)
- Tickets Home Page (customer view)

Edit-Customer details (customer view)

The customer can view/edit their details.

Search tickets page (customer view)

This will be like the admin view, but it should present only the tickets for the current customer.

It should be noted that all described above are the front-end functionality. They must be supported by the corresponding back-end system which provides all data and operations through a well-defined REST API.

Non-functional Requirements

1. Any IDE (IntelliJ is suggested)
2. Java SE 11
3. Jakarta EE
4. Application Server Wildfly 25.0.1
5. MySQL Server
6. Suitable Object Relation Mapping library
7. Dependency Injection is required
8. HTML 5
9. CSS and/or Bootstrap CSS framework (be careful that no templates are allowed)
10. JavaScript (ES5/ES6)
11. Coding and architectural standards and conventions
12. VCS: Project's source code must be delivered on GitHub for each team member's contribution depicted by commits with clear and descriptive messages. Use branches for each feature development.

Milestones

The following steps might help you to organize your work

- Prepare and implement the domain entities and consequently form the shape of the database and the structure of your webapp
- Create a GitHub repository and the accounts of your team members.
- Implement the home pages of Admin and Customer
- Implement insert / search / modify / delete for customers by the admin
- Implement insert / search / modify / delete for Tickets by the admin.
- Implementation of login functionality, security features.
- Implement pages for customer view
- Implement any of the nice-to-have functionalities