

ETIYA CRM SYSTEM

Etiya Academy 9th term / PAIR 4



AGENDA

Meet Our Team

We are a total of 11 people, with three different departments.

CRM SYSTEM

- What is a CRM System?
- Benefits of CRM in the Telco Domain

Our Project

We will focus on two functional requirements in the B2C part of the project.

Q&A

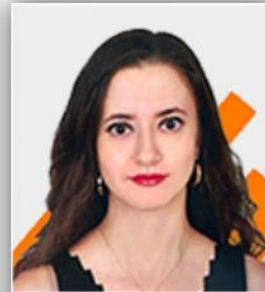
Feedback session.

PAIR 4

BUSINESS ANALYSIS TEAM



SELDA ÇELİK
Specialist, Business
Analysis



NİLBERK BULUN
Specialist, Business
Analysis



CANAN ÇOŞKUN
Specialist, Business
Analysis



BERFİN ÖZER
Trainee, Business
Analysis

PAIR 4

SOFTWARE DEVELOPMENT TEAM



EREN MACİT
Specialist, Software
Development



ANIL AYGÜN
Specialist, Software
Development



ENES YAVUZ
Specialist, Software
Development



HÜSEYİN MENTEŞE
Specialist, Software
Development

PAIR 4

SOFTWARE QUALITY
ASSURANCE TEAM



MİRAY SÖNMEZ
Specialist, Software
Quality Assurance



DİLARA GEBEŞ
Specialist, Software
Quality Assurance



DİDEM BORAN
Specialist, Software
Quality Assurance

| What is a CRM System?

Customer Relationship Management (CRM)

- Collects customer data into a single hub.
- Increases customer satisfaction through personalized services.
- Optimizes sales and marketing processes.



Benefits of CRM in the Telco Domain

Offers and services tailored to customers' interests, based on their buying behaviors and interactions

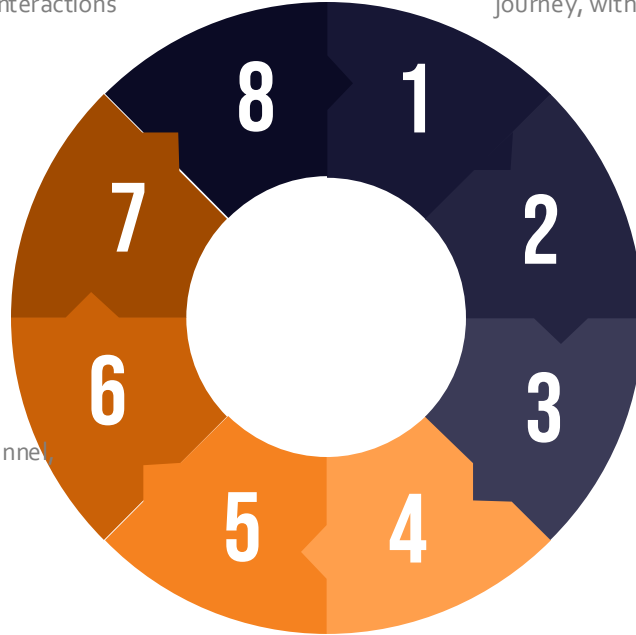
Personalized experiences throughout the entire customer journey, with AI-driven predictions and recommendations

Easy to manage large business customers, their accounts, and their account relations

Improved customer conversion ratios via predictive and prescriptive analytics

Consistent customer experience provided on any channel, any device, at any time

Dynamic Sales and Customer Support workflows and workflow automations for improved operational efficiency



Quick and effective actions and communication tools for customer loyalty and retention

Near real-time decision support for sales performance and operational efficiencies, via sales KPI dashboards

Agile Transformation in the SDLC for the CRM System

Preparing Software to Run

- ✓ Faster and Reliable Releases



Ideation and Document the Project Requirements

- ✓ Team Collaboration and Flexibility



Evaluating the Quality of Software

- ✓ Continuous Testing and Feedback



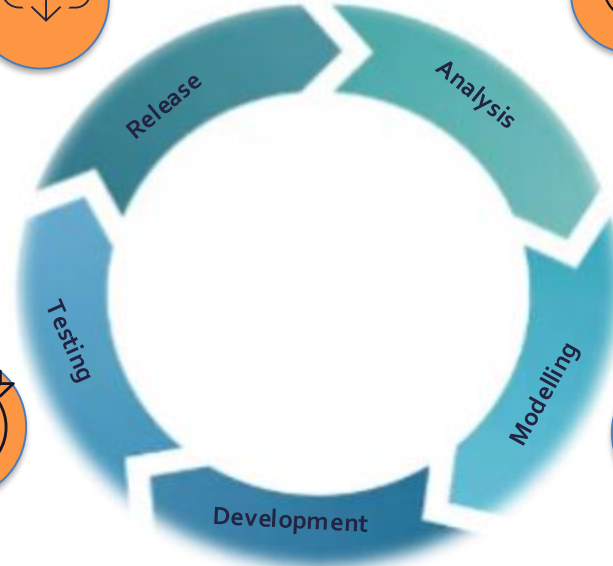
Creating the Architecture

- ✓ Iterative Design and Real-time Feedback



Building the software using the programming language

- ✓ Rapid delivery and Continuous Improvement



Analysis Process and Project Tools

| Analysis Process

1

Preparing the Analysis Document

- ✓ Defining Functional Requirements for the CRM System
- ✓ Defining Acceptance Criteria

2

Modelling

- ✓ Data Modeling and ER Diagram Creation
- ✓ Designing Mockups in Figma

3

Entering information into Shift

- ✓ Combination of Functional Requirements, Use Cases, Epics, Mockups, and Activity Diagrams

Project Tools



Shift Jira



DBBeaver

Postman

SQL



Draw.io

Figma



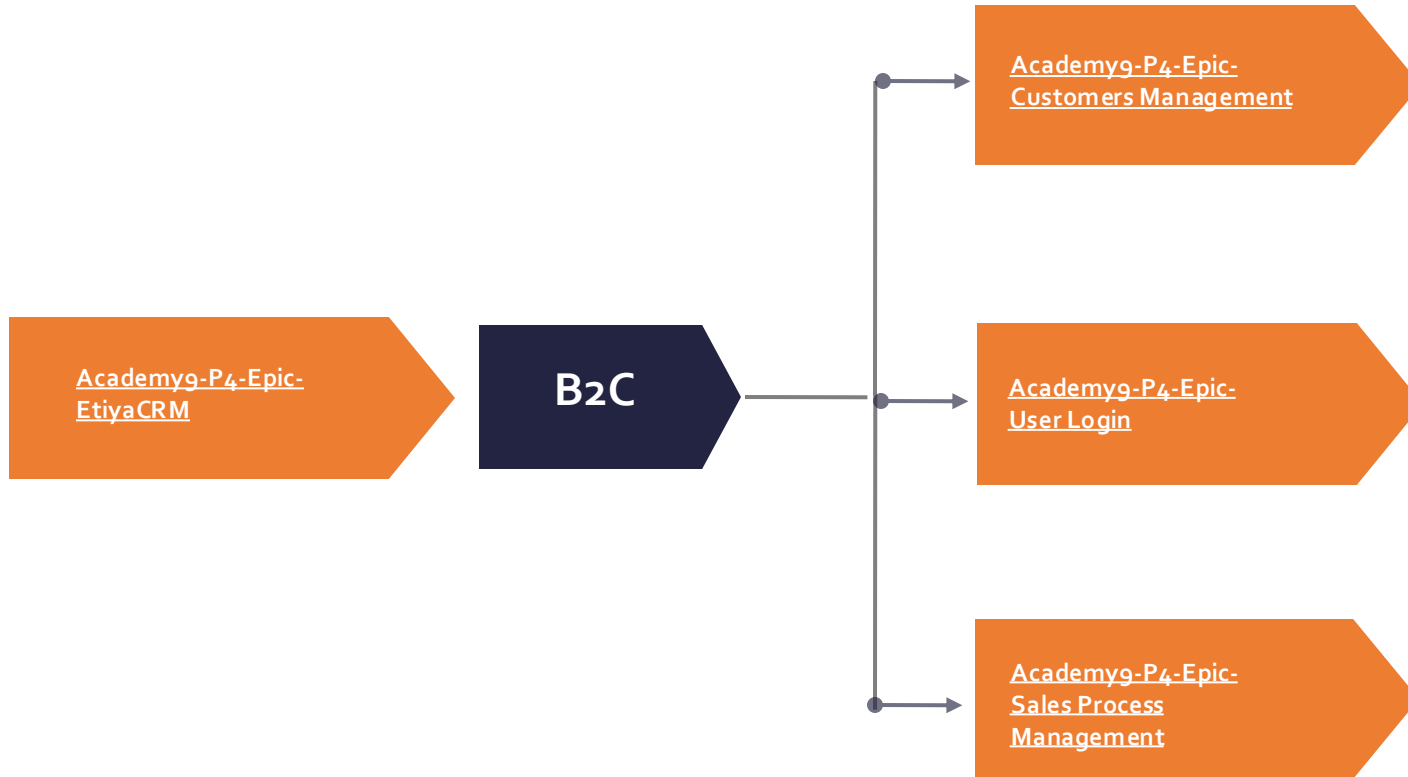
Selda Çelik
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Trainee, Business Analysis





[Go to Figma](#)

CRM System Mock-ups in Figma



Quickly and easily search for customer details.

- Easily access customer information with CRM searches. Use different criteria to filter the customer data you're looking for. Find the information you need in the most efficient way.

The screenshot displays the ETIYA CRM Lite web interface. At the top, the header includes the ETIYA CRM Lite logo, language and region selectors (B2C, B2B, EN | TR), and a user profile for Maria Garcia, CRM Specialist. Below the header is a 'CUSTOMER SEARCH' section. On the left, a 'SEARCH FILTER' panel contains input fields for Customer ID, NAT ID (pre-filled with 45912025196), GSM Number, Account Number, First Name, Middle Name, and Last Name, each with a clear icon. At the bottom of this panel are 'CLEAR ALL' and 'SEARCH' buttons. On the right, the 'SEARCH RESULTS' section shows a table with one result.

Customer ID	Nat ID	GSM Number	Account Number	First Name	Middle Name	Last Name
7954010136	45912025196	+(90)5554145008	L3UGLFNTVG	Ayge	Nur	Demir

Can't find the customer you're looking for? Create a new customer record and add the details right away.

- If the customer you're looking for is not found in the system, you can start by creating a new customer record. Enter the customer details accurately and completely to add them to the database. Click the 'Create New Customer' button to proceed.

The screenshot displays the ETIYA CRM Lite web application. The top navigation bar includes the logo, user profile (Maria Garcia, CRM Specialist), and language (EN | TR). Below the navigation bar, there are two dropdown menus for 'B2C' and 'B2B'. The main content area is divided into two sections: 'CUSTOMER SEARCH' and 'SEARCH RESULTS'.

CUSTOMER SEARCH

SEARCH FILTER

Customer ID

NAT ID

GSM Number

Account Number

First Name

Middle Name

Last Name

SEARCH RESULTS

Customer ID	Nat ID	GSM Number	Account Number	First Name	Middle Name	Last Name
<p>No customer found!</p> <p>Would you like to create the customer?</p> <p><input type="button" value="CREATE NEW CUSTOMER"/></p>						

Fill in the necessary information to create a new customer record. Ensure all details are complete for a smooth registration process.

- Once the required customer details are entered, click the 'Next' button to proceed to the next step, where you will add address and contact information.

The screenshot shows the 'Create Customer' form in the ETIYA CRM Lite interface. The form is divided into three tabs: 'Customer Info', 'Address', and 'Contact Medium'. The 'Customer Info' tab is currently active. It contains the following fields:

- First Name (*): Aysa
- Middle Name: Nur
- Last Name (*): Demir
- Gender (*): Female (dropdown menu)
- Nat ID (*): 40264412650
- Birth Date (*): 15.03.1990 (calendar icon)
- Mother Name: Fatma
- Father Name: Mehmet

At the top of the form, there is a 'Create Customer' button with a back arrow. At the bottom right, there is a 'Next' button. The background of the interface features a 3D geometric pattern of cubes and lines.

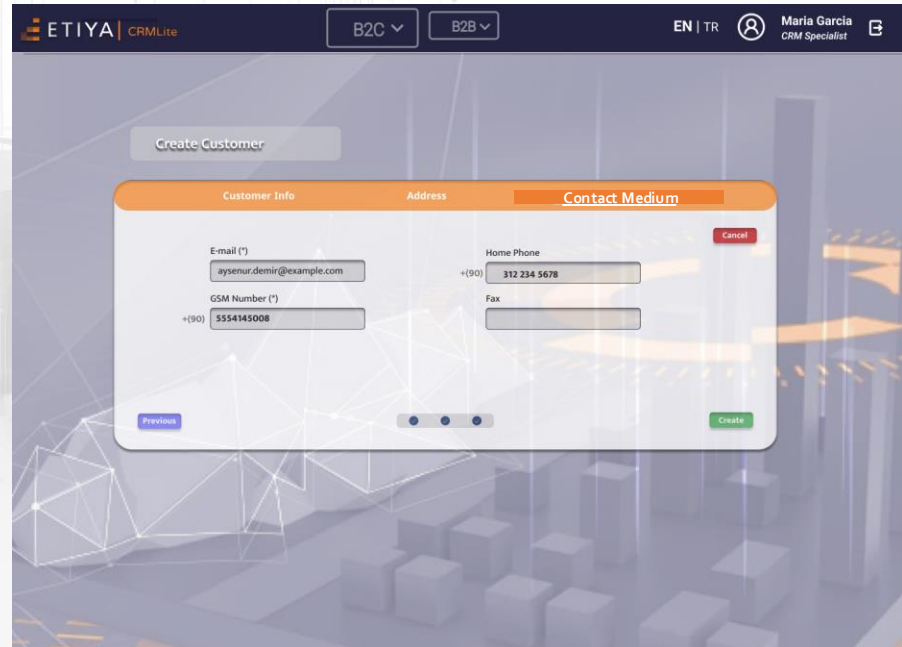
Fill in the necessary information to create a new customer record. Ensure all details are complete for a smooth registration process.

- Once the required customer details are entered, click the 'Next' button to proceed to the next step, where you will add address and contact information.

The screenshot displays the 'Create Customer' form in the ETIYA CRM Lite application. The interface is in a dark theme with a purple header. The header includes the ETIYA CRM Lite logo, language and region selectors (EN | TR), and a user profile for Maria Garcia, CRM Specialist. Below the header, a 'Create Customer' button is visible. The main form area has three tabs: 'Customer Info', 'Address' (which is active), and 'Contact Medium'. The 'Address' tab contains several input fields: 'City (*)' with a dropdown menu showing 'Ankara', 'District (*)' with a dropdown menu showing 'Çankaya', 'House / Flat number (*)' with a text input containing '127/8', 'Street (*)' with a text input containing 'Atatürk Bulvarı', and 'Address Description (*)' with a text input containing 'Berfin Market Yarı, 3. kat'. There is a 'Default Address' radio button which is selected. A 'Previous' button is on the bottom left, and a 'Next' button is on the bottom right. A 'Cancel' button is located in the top right corner of the form area.

Fill in the necessary information to create a new customer record. Ensure all details are complete for a smooth registration process.

- Complete the customer registration by entering the contact details. After filling in all required fields, click 'Create' to finalize the process and save the customer information in the system.



The screenshot displays the 'Create Customer' form in the ETIYA CRM Lite application. The form is divided into three tabs: 'Customer Info', 'Address', and 'Contact Medium', with the 'Contact Medium' tab currently selected. The form contains several input fields for contact information:

- E-mail (*)**: a text field containing 'aysenur.demir@example.com'.
- GSM Number (*)**: a text field with a country code dropdown set to '+90' and a value of '5554145008'.
- Home Phone**: a text field with a country code dropdown set to '+90' and a value of '312 234 5678'.
- Fax**: an empty text field.

At the bottom of the form, there are three navigation buttons: 'Previous' (blue), a set of three dots indicating the current step, and 'Create' (green). A 'Cancel' button is also visible in the top right corner of the form area. The application header shows the ETIYA CRM Lite logo, user selection dropdowns (B2C and B2B), language settings (EN | TR), and the user profile (Maria Garcia, CRM Specialist).

Application Programming Interface

- ResourcesYour API includes the following 3 main resources ;
 - ✓ /login
 - ✓ /customer
 - ✓ /product
 - ✓ /order



Development Process and Project Tools

Project Tools

Intellij IDEA

Visual Studio Code

Podman

npm

Git-Github

Postman/Swagger

AngularJs

Tailwind CSS

Spring Boot/ JPA

MapStruct

Lombok

Eureka/Kafka

MongoDB Compass

DBeaver

Postgres

MySql

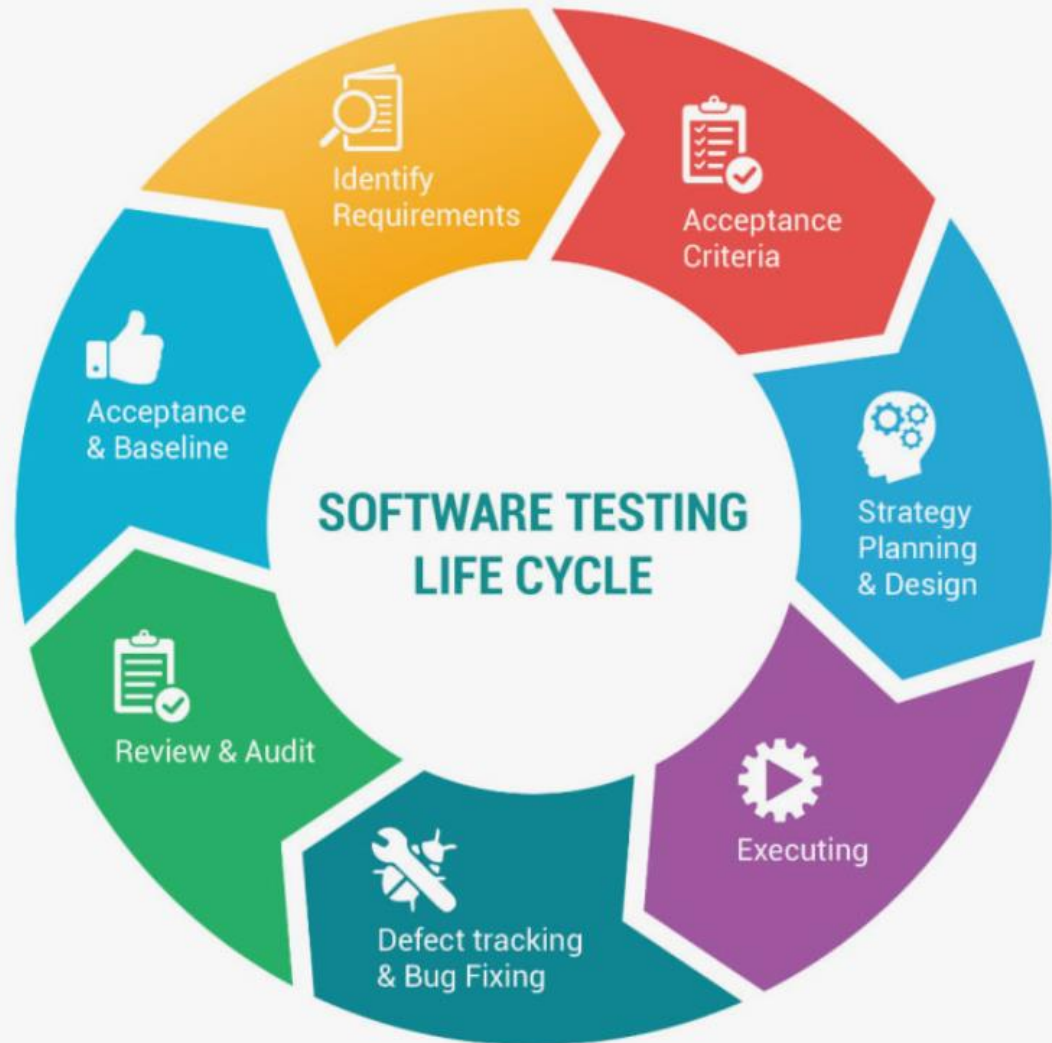
Redis

OpenFeign

Testing Process and Project Tools

- ✓ Business analysts submit the requirements document
- ✓ Creation of test scenarios
- ✓ Creation of test cases
- ✓ Identification of pre-conditions
- ✓ Determination of expected result
- ✓ Comparison of expected results and actual results

Didem Boran
Specialist, Software Quality Assurance



Advantages of Manual Testing

- Detection of uncoded bugs
- More likely to find real user problems
- Continuous development at the interface level
- Small projects that need to be completed in a short time
- Tests run at longer intervals
- Automating tests is too costly or difficult

Advantages of Test Automation

- Speed and Efficiency
- Repeatability
- Large Data Set Testing
- Early Bug Detection
- High Coverage
- Time Savings
- Documentation
- Reduced Human Error
- Continuous Testing
- Cost-Effectiveness

Project Tools

Excel

Shift Jira

IntelliJ IDEA

Podman

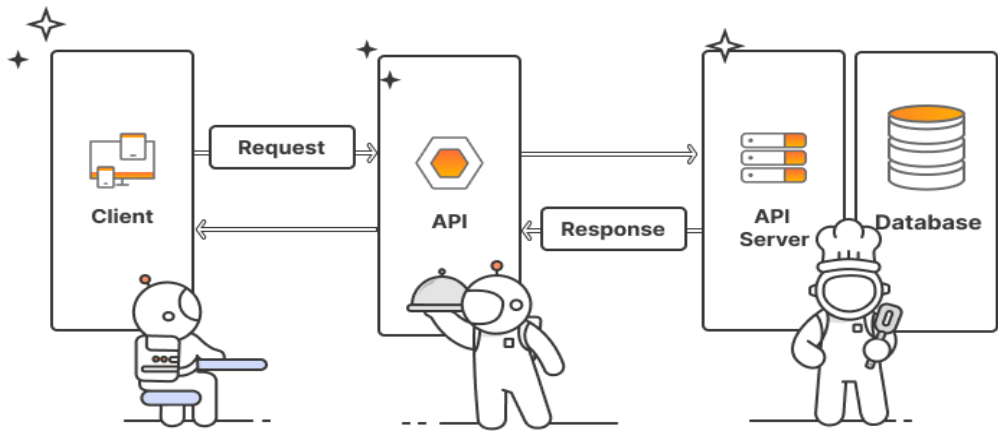
Postman

Selenium

Github



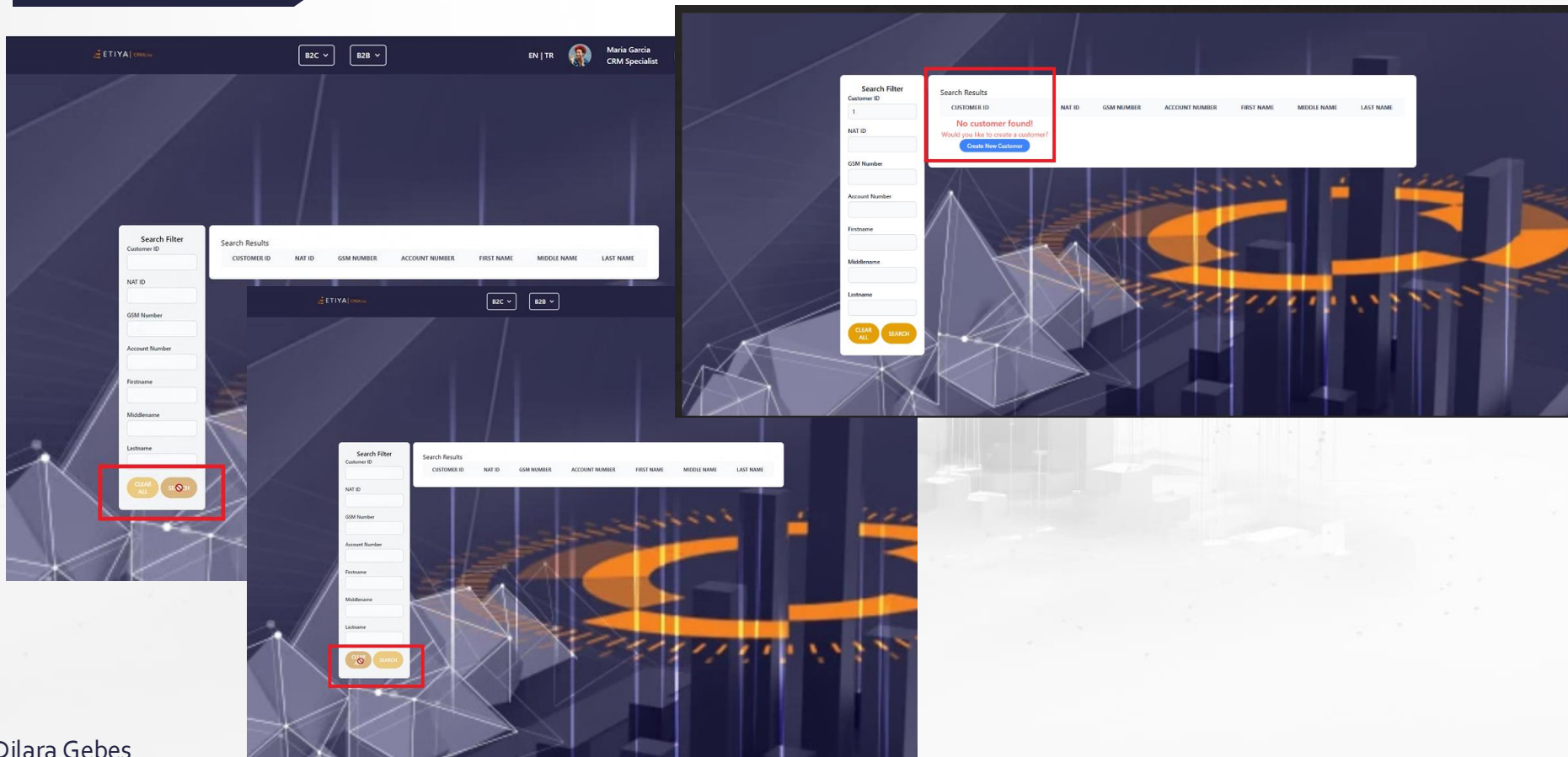
What is API?



HTTP METHODS

- GET
- POST
- PUT
- DELETE







Selenium

Automation Testing

Is an open-source tool for automating web browsers, allowing developers and testers to simulate user interactions with web applications across different browsers.

Chrome otomatik test yazılımı tarafından kontrol ediliyor.



<https://www.saucedemo.com/inventory.html>



Performance and Load Tests with JMeter

Test Case

1

The response time should not exceed 4 seconds when 500 users access the website simultaneously.

Test Case

2

Ensuring the site's response time remains within an acceptable range under load when the network connection is slow.

Test Case

3

Checking the maximum number of users the site can handle before crashing.

Q&A



Thank you!

