Tech Test
Digital & Innovation

.Net Mid Developer + React.js

The better the question. The better the answer.
The better the world works.

EY

Building a better
working world

Before you start...

The better the question. The better the answer.
The better the world works.

EY
Building a better
working world

You need to complete the following:

1. It´s required an active Github user to complete this test.

2. Send an email to EY Digital & Innovation Team with the subject "Access Request for Tech Test - <GitHub username>", once the permission is granted your test time will start.

3. Clone the repository you were added to.

4. Once you clone the repository, create a branch with the name "Dev-<First Name>-<Last name>".
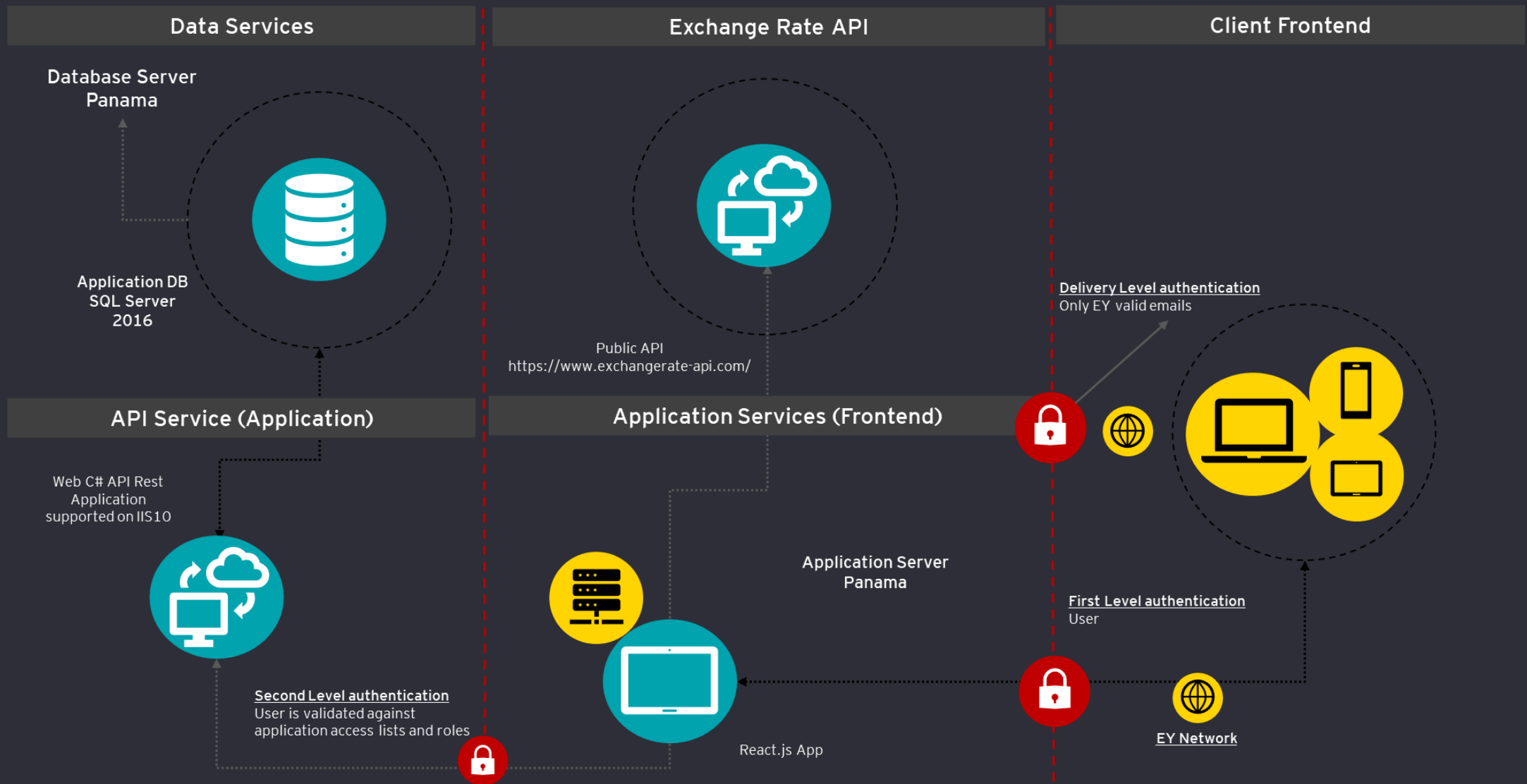
Key points

You'll have 72 hours to complete the test starting when your Github repository access is granted.

EY

Tech test statement and definition

EY

1. Analyze the following software architecture diagram (SAD):

Data Services

Database Server
Panama

Application DB
SQL Server
2016

Exchange Rate API

Public API
https://www.exchangerate-api.com/

Client Frontend

<u>Delivery Level authentication</u>
Only EY valid emails

API Service (Application)

Web C# API Rest
Application
supported on IIS10

Application Services (Frontend)

Application Server
Panama

<u>First Level authentication</u>
User

<u>Second Level authentication</u>
User is validated against
application access lists and roles

React.js App

<u>EY Network</u>

EY

Based on the previous SAD complete the following tasks:

1. Create the following components of the SAD: Data Services, API Service and Application Services (Frontend); you must build each component according to the technology requested in the SAD.

2. Using Code First model create an empty database named: ''DI_MFSD_<Your name First Letter>_<Your last name>'' in order to complete data services component.

3. Add .gitignore files for API Service and Application Services (Frontend) components according to each IDE.

4. Take a look at the Exchange Rate API component, this is a free API to request different exchange rates using a currency as base. Review the [documentation](#).

5. Execute your first commit with the following description: "First Commit - Creating initial structure".

EY

First Sprint

Let's start with your assignments...

EY
Building a better
working world

Complete the following user stories

As a general user I want to login into the application using my EY email and password.

Description:

It's required for all users to enter an EY valid email and password. A valid email should have "@ey.com" domain and must be registered in the application users catalog. If the user doesn't have access the application will raise a message indicating this problem.

Priority

Highest

As a general user I want to see all the exchange rates taking USD as base as a Home Page.

Description:

Using the Exchange Rate API is required to list all the available exchange rates for USD currency. The ER must be listed in small boxes where the user can see: Currency base, destination currency, exchange rate and the last update date.

Priority

Highest

As a general user I want a search bar to filter by the destination currency code.

Description:

When the user type the code of the destination currency code the application must filter in the exchange rate boxes and only show the matching exchange rates.

Priority

Medium

As a general user I want to convert any amount between USD and destination currency; and vice versa.

Description:

The users will be able to enter any amount in a specific field and the application will calculate the conversion using the exchange rate, also is required that the user indicates what's the source and destination currency.

Each ER box will have the exchange rate conversion functionality.

Priority

High

As an administrator I want to log the usability of the exchange rate converter.

Description:

It's required that the application stores in the database all the transactions the users make using the converter. The application should store: Username, source currency, destination currency, exchange rate and request created date.

Priority

High

As a general user I want a greeting label when the login was successful.

Description:

The greeting message must be always visible at top of the page and will depend of the current time.

Ex. In the morning -> "Good morning, " + <Username>

Priority

Low

EY

More user stories...

As a general user I want to see the log of usability of the application.

Description:

It's required for all users to see the list of the latest 20 transactions made from other users, this section must appear at the right side of the Home Page. All the log information is showable to users.

Priority

Medium

As a general user I want to see the count of transactions of the current date

Description:

Showing the count of current day transactions, must be located above the listed log transactions at Home Page.

Priority

Low

As a general user I want to see the currency name instead the currency code.

Description:

It's required to show the currency name base on the ISO 4217 codes.

Priority

Medium

EY

Sending test results

How to finish the test...

EY

Building a better
working world

The better the question. The better the answer.
The better the world works.

Before you finish...

1. Make sure all your code can be build and run with out compilation errors.

2. Make sure all your code and solutions are located in the right folder.

3. Commit your code into your local branch.

4. Create a pull request to master branch in the remote repository.

5. Send an email to EY Digital & Innovation confirming you created the pull request and finished the test.

EY

EY | Assurance | Tax | Transactions | Consulting

Acerca de EY

ey.com

Great Place To Work®
Certificación
2019
CA&C

Organización Regional: Costa Rica - Tel. (506) 2208-9800 | **El Salvador** - Tel. (503) 2248-7000 | **Guatemala** - Tel. (502) 2386-2400
Honduras - Tel. (504) 2235-7430 | **Nicaragua** - Tel. (505) 2253-8430 | **Panamá** - Tel. (507) 208-0100 | **República Dominicana** - Tel. (809) 472-3973