

# IBM - Marketing Services Center

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*Practical test for the Application Developer role*

We kindly ask you to develop an orchestrator system for a chatbot solution. This chatbot is responsible to create and search for tickets.

## User journey

1. User access an application with username and password
2. User starts to interact with the chatbot solution
  - 2.1. **Ticket creation scenario**
    - 2.1.1. The user requests to create a ticket
    - 2.1.2. Chatbot asks for a problem description
    - 2.1.3. The user fills all the necessary information
    - 2.1.4. Chatbot register a ticket
  - 2.2. **Ticket search scenario**
    - 2.2.1. The user requests to search for a ticket
    - 2.2.2. Chatbot show all the tickets status of the logged user
3. Application process the information
4. User journey ends

Don't stay just at this introduction, implement any upgrades you think it's necessary to show your skills.

## Development activities

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- Development of an application to search and create tickets
- Development of an interface for the chatbot solution
- Development of an application to orchestrate the information between the chatbot interface and the IBM Watson Assistant
- Train the chatbot to create and search for tickets

We recommend the free services from [IBM Cloud](#) (Cloud Foundry, Cloudant, DB2, etc), but you can use the free services from other hosting platforms (Heroku, MongoDB Atlas, etc.).

IBM Watson Assistant is the only mandatory service that you must use and it's available for free at [IBM Cloud](#).

We kindly ask you to use a git repository on GitHub to better manage your code. If you don't have an account you can [create one for free](#). After the development of the solution, you will be sharing with us your repository link address for us to analyze your solution.

**Don't forget to share any credentials and the documentation of how to run your code locally!**

## What we are expecting

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- Frontend
  - Usage of Vue.js, React or Angular frameworks to develop the interface
  - Responsive Design
  - Accessibility
- Backend
  - Database modeling
  - API Routes
- Backend & Frontend
  - Versioning at GitHub
  - Solution architecture
  - Usage of best practices during the development of the solution

## How to deliver your test

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Send an e-mail to the person that contacted you (Decision, Stefanini or IBM) with the GitHub repository link. Make sure the repository visibility is public.

## Test and portfolio presentation

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After the delivery of the test, our team will analyze carefully your solution and we will be expecting your visit to our site to present the solution you managed to develop.

## Doubts? Problems?

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Send an e-mail to the person that contacted you (Decision, Stefanini or IBM) about the problems you are facing and we will be happy to help you.