

Test for	Full-Stack Java Developer	Version	1.0
Candidate's Full Name		Date (M/D/YYYY)	
Max. Time to Complete Test	24hrs.	Grade (Not to fill by Candidate)	

GENERAL NOTE

Please read the entire document before starting your test, you will have a period of 2 hours to send concerns of the requirement you may have, these will only be attended if they are related to doubts in the way the final product should look or function (please attach to your question the section of the paragraph that generated that doubt). Technical questions will not be considered.

The application must be developed in Java (optional Spring Boot Framework). For the frontend is needed to implement Angular framework 6+. SQL Server must be used for the database.

*Please inform which Front-End framework you used.

Context

It is required to build a web application that allows users to interact with a TV shows catalog and to perform the following actions:

- Search shows by keywords.
- Search shows by Language.
- Search shows by Genre.
- Search shows by Channel.
- Search shows by Schedule Time.
- When the user selects a specific show, it must:
 - Show the basic information about the show:
 - Picture:
 - Show's name.
 - Summary.
 - Cast.
 - Seasons and episodes list.
 - The user must be able to search episodes by Date: It must handle the exception when no show is found on the selected date.

The application must be integrated with the REST API of the TV Maze site (<https://www.tvmaze.com/api>). You must explore this API and interact with some of the endpoints described there to build the application.

Additional requirements:

- There must be an User's complete CRUD.
 - Every action performed in the CRUD must be logged into a flat file (.txt) in the hard drive. The log must have to be clear enough to understand what action was performed and to which user.
- There must be two roles within the application:
 - Administrators: They can manage users.
 - Users: They can only access the site and perform searches.
- The DB to interact with is SQL Server.
- Every user must have a username and password to access the site.
 - The passwords must be stored encrypted.
- When the site is displayed, a complete Shows catalog must be displayed, and all the filters and search options must be on top of the catalog.
- Always a picture of the show must be displayed in every related page.
- Sorting options that must be included in the Shows page:
 - By rating.
 - By channel.
 - By genre.

Deliverables

- Complete solution with the source code.
- DB Scripts.
- Video of the application working. This is required to avoid compatibility issues when grading.
 - You could use a free tool to record video from your PC. Here are a few recommended:
 - Active Presenter (free trial): <https://atomisystems.com/download/>
 - OBS: <https://obsproject.com/>
 - Windows 10 native application: <https://www.pcmag.com/how-to/how-to-capture-video-clips-in-windows-10>
 - You must guide the video with your voice. You will have to say your full name and then do the walkthrough to the application you built in your environment.
- You can share the deliverables through a free cloud-based solution, such as Dropbox, Google Drive or Microsoft OneDrive.