

Vacancy Web application

FULLSTACK DEVELOPER FINAL ASSIGNMENT

Installation Guideline

Attemp-3

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Vacancy Web is a Java spring-boot react web application that allows the system owner to post the vacancy and let people apply for the position.

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1 Introduction

Today vacancy web apps are one of the essential online tools where employees can register, post and search jobs (openings). It basically helps job seekers to find and apply for relevant jobs. Vacancy based web applications can provide an easy platform to search available job positions based on interest and skills, enabling them to submit their resume directly through our website. Here I have developed a vacancy Web application using Java spring-boot react.

This document provides necessary software installation and configuration setups.

2 List of requirement

Make sure computer has properly installed bellow software architectures (tools). *Please select download source platform according to your system environment (i.e. Linux, Windows and macOS)*

2.1 Java Development Tool kit (JDK)

It is a compiler that enables us to compile, test, debug and run our Java Spring Boot MVC project. Download and install the latest version of JDK from the link below.

Link: <https://www.oracle.com/in/java/technologies/downloads/>

2.2 Node.js

It is an open source JavaScript runtime environment that allows us to run JavaScript code outside the web Browser. Here our project used to run frontend using the npm module which by default installed with the node JS. Download and install latest version of Node JS from below link:

Link: <https://nodejs.org/en/download>

2.3 JetBrains IntelliJ IDEA

It is an integrated java development environment used to create our Vacancy Backend app using JAVA Spring Boot MVC architecture. Download and install latest version of JetBrains IntelliJ IDEA from below link:

Link: <https://www.jetbrains.com/idea/download/>

2.4 Webstorm

WebStorm is an IDE - integrated development environment for TypeScript and JavaScript.

It helps to develop, debug, test, refactor and manage version control with Git. Download and install latest version of Visual Studio Code from below link:

Link: <https://www.jetbrains.com/webstorm/download/>

2.5 PostgreSQL

It is a powerful open source object relational database system that utilizes to store the most complicated data workload. So here our project utilized a backend database as PostgreSQL. Download and install latest version of PostgreSQL from below link:

Link: <https://www.postgresql.org/download/>

3 Step-by-step installation instructions

This section provides step-by-step installation requirements.

3.1 Database

Please follow below steps to create and store vacancy web application data into PostgreSQL.

STEP-1) Double click on icon “pgAdmin 4.exe” in the desktop (or it may available in C:\Program Files\PostgreSQL\17\pgAdmin 4\runtime\) and create new database called “dbVacancy”

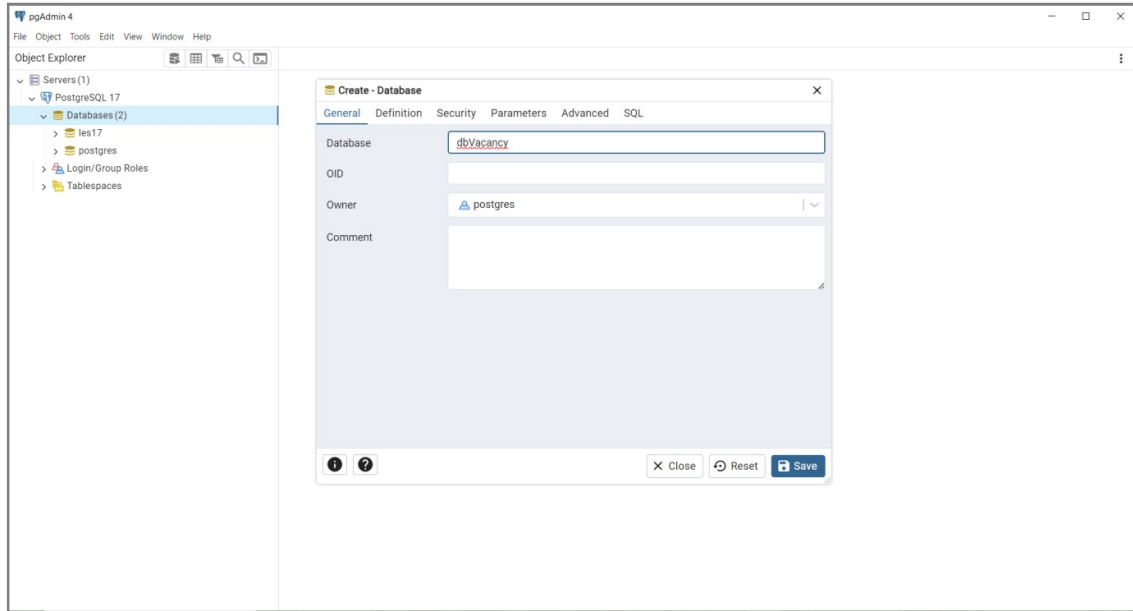


Figure 1 Create dbVacancy databse

STEP-2) Open the query tool window, copy and paste the entire query from “dbVacancy.sql” and execute them. **(Optional)**

This step is optional because it creates database structure and insert default records as soon as run backend project.

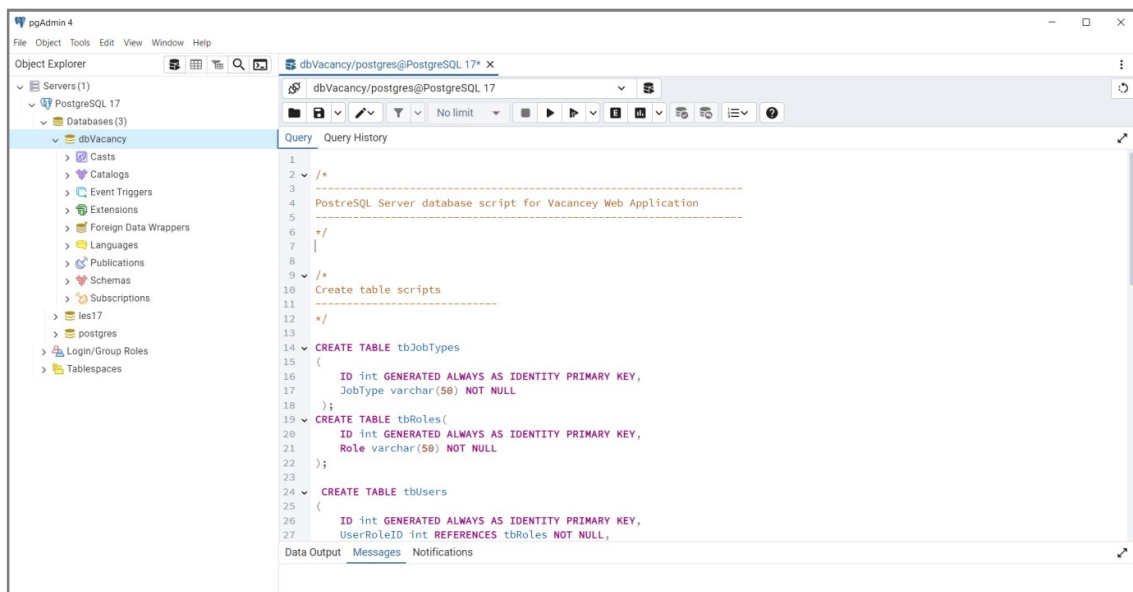


Figure 2: Execute database script to create data and insert records

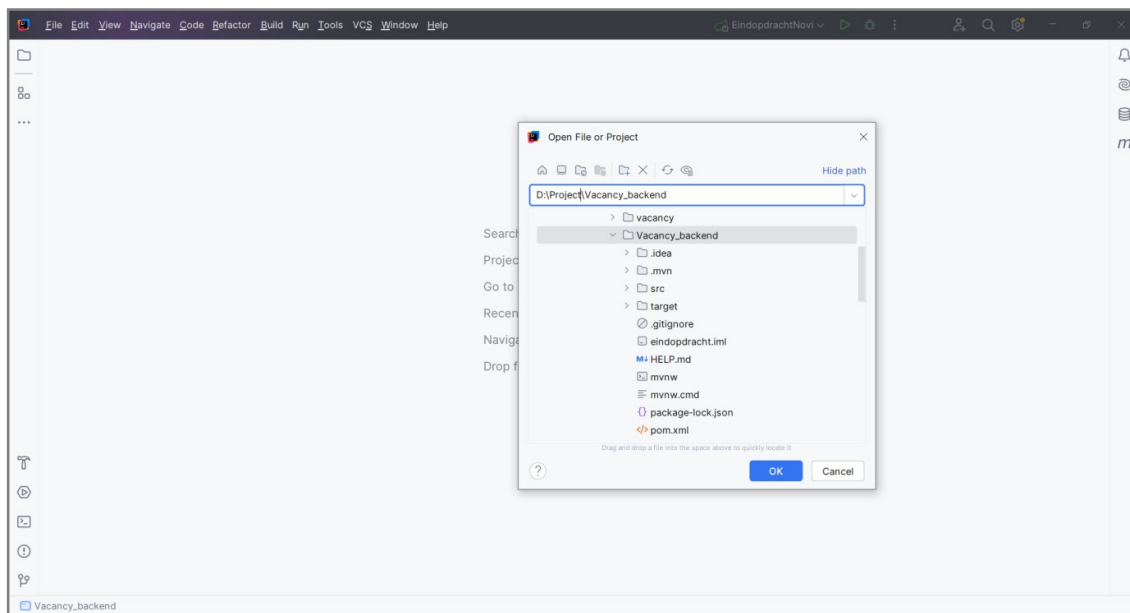
STEP-3) now our database is ready for further operation.

3.2 Backed project (Java Spring Boot)

Please follow below steps to open the backend project into JetBrains IntelliJ IDEA.

STEP-1) Double click on icon “idea64.exe” available on desktop (or it may available in *C:\ideaIU-2024.3.2.1.win\bin* folder)

STEP-2) Open menu bar and select file > Open then navigate and select our backend project folder “Vacancy_backend”

**Figure 3: Open backend project in JetBrains IntelliJ IDEA**

STEP-2) Update database connection parameters (i.e. database name, username and password) in “application.properties” file

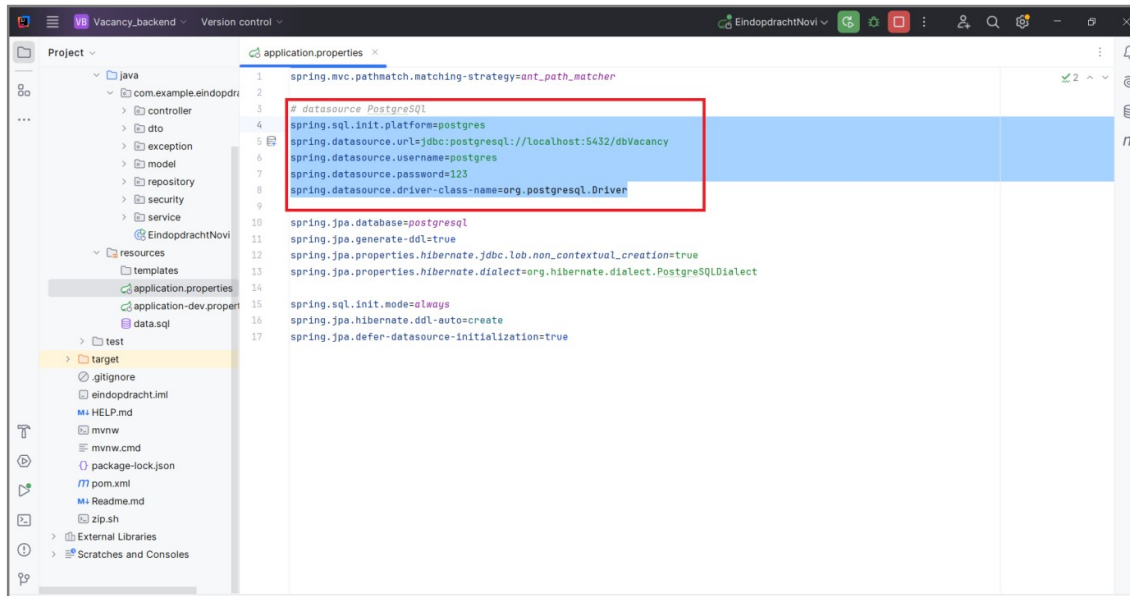


Figure 4: Update database connection parameters

Project default values

spring.datasource.url=jdbc:postgresql://localhost:5432/dbVacancy
spring.datasource.username=postgres
spring.datasource.password=123

Update above fields (i.e. password, username and database name) according to your specific values if differently configured postgresQL in your system.

STEP-3) Now build the project and click on run. It will run our vacancy web backend on Tomcate server.

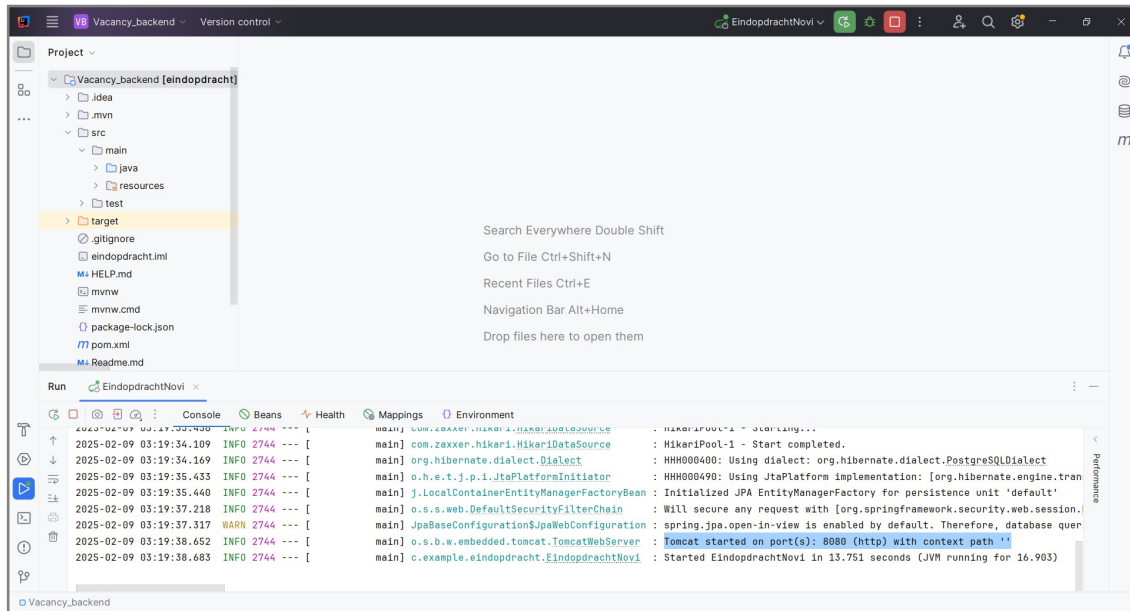


Figure 5: Backend project running successfully on Tomcat server

3.3 Frontend project (Java React)

Please follow below steps to open the frontend project into Webstorm.

STEP-1) launch webstorm software tool and click on file > open project and then select frontend project

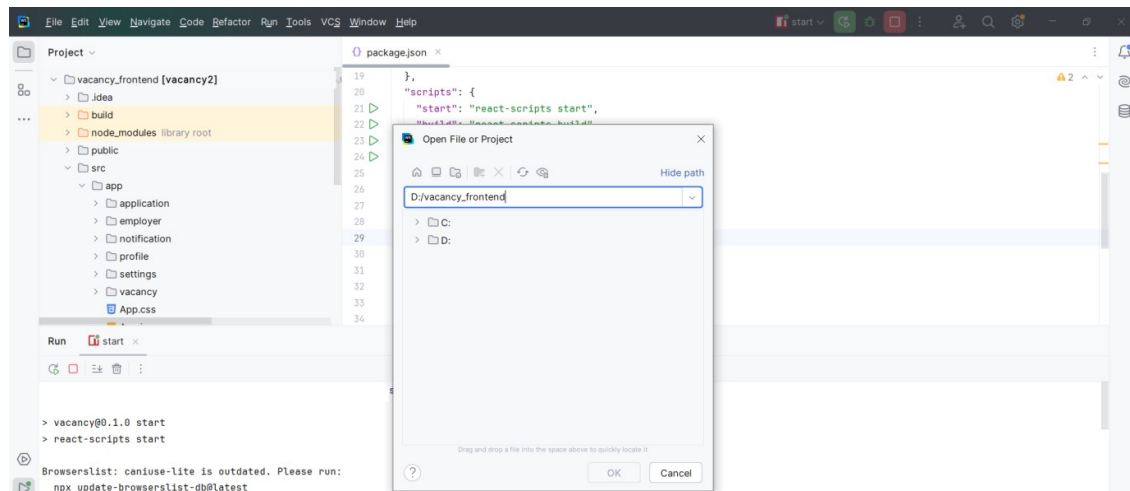


Figure 6: Open frontend project in Webstorm

STEP-2) Go to the terminal window and run command “npm start” to execute Java React frontend project.

Please note run “npm install” command (if first time opens the project)

Or

Hit run button

Webstorm will open the browser window and load our default index page.

Now both the projects (Java Spring Boot Web application i.e. backend and Java React App i.e. frontend) running successfully.

4 List of (test) users and user roles

This table can be used to test vacancy web application for employer and candidate user account.

No	Role	Username	Password
1	Candidate	dd0gan	dd0gan
2	Candidate	karel	karel
3	Employer	tien	tien

Table 1: Test user accounts with their role, username and password.

5 Postman collection

This can be used to test your application

6 List of REST endpoints

- A list of REST endpoints, including examples of the JSON requests. These examples must be written out as in Postman, so that you can easily select, copy and paste them. In this you also explain how the endpoints are secured.