

PROJECT TITLE:

TO DO LIST APPLICATION.

TO GET ORGANIZED

Several thin, white, parallel diagonal lines are positioned in the bottom right corner of the slide, extending from the bottom edge towards the right edge.

OBJECTIVES OF THE PROJECT:

- By keeping such a list, you make sure that your tasks are written down all in one place so you don't forget anything important.
- And by prioritizing tasks, you plan the order in which you'll do them, so that you can tell what needs your immediate attention, and what you can leave until later.

TEAM INTRODUCTION:

VADIGE SRISHASHANK

EEE



SRIRANGAM.THARUN KUMAR

ECE



VETCHA KARISHMA

ECE



PRESENTATION LAYER:

- The Presentation Tier is responsible for presenting data and interacting with the user.
- It is implemented by a client responsible for all the user experience.
- The client interacts with the ORM API to read, write, verify, or perform any other action, calling ORM API methods through remote procedure calls (RPCs).
- These are sent to the Apache tomcat server for processing, and then the results are sent back to the client for further handling.

BUSINESS LOGIC LAYER:

- The Logic Tier is responsible for all the interactions with the data layer, and is handled by the Apache tomcat server.
- As a general rule, the low-level database should only be accessed by this layer, since it is the only way to ensure security access control and data consistency.
- At the core of the Apache tomcat server, we have the object-relational mapping (ORM) engine for this interface.
- The ORM provides the application programming interface (API) used by the add-on modules to interact with the data.

DATA LAYER:

- The Data Tier is the lowest-level layer, and is responsible for data storage and persistence.
- Apache tomcat relies on a MySQL server for this. MySQL is not only supported database server, but this is a design choice.
- So, other databases such as H2 are also supported.
- Binary files, such as attachments of documents or images, are usually stored in the filesystem, in a directory referred to as the file store.

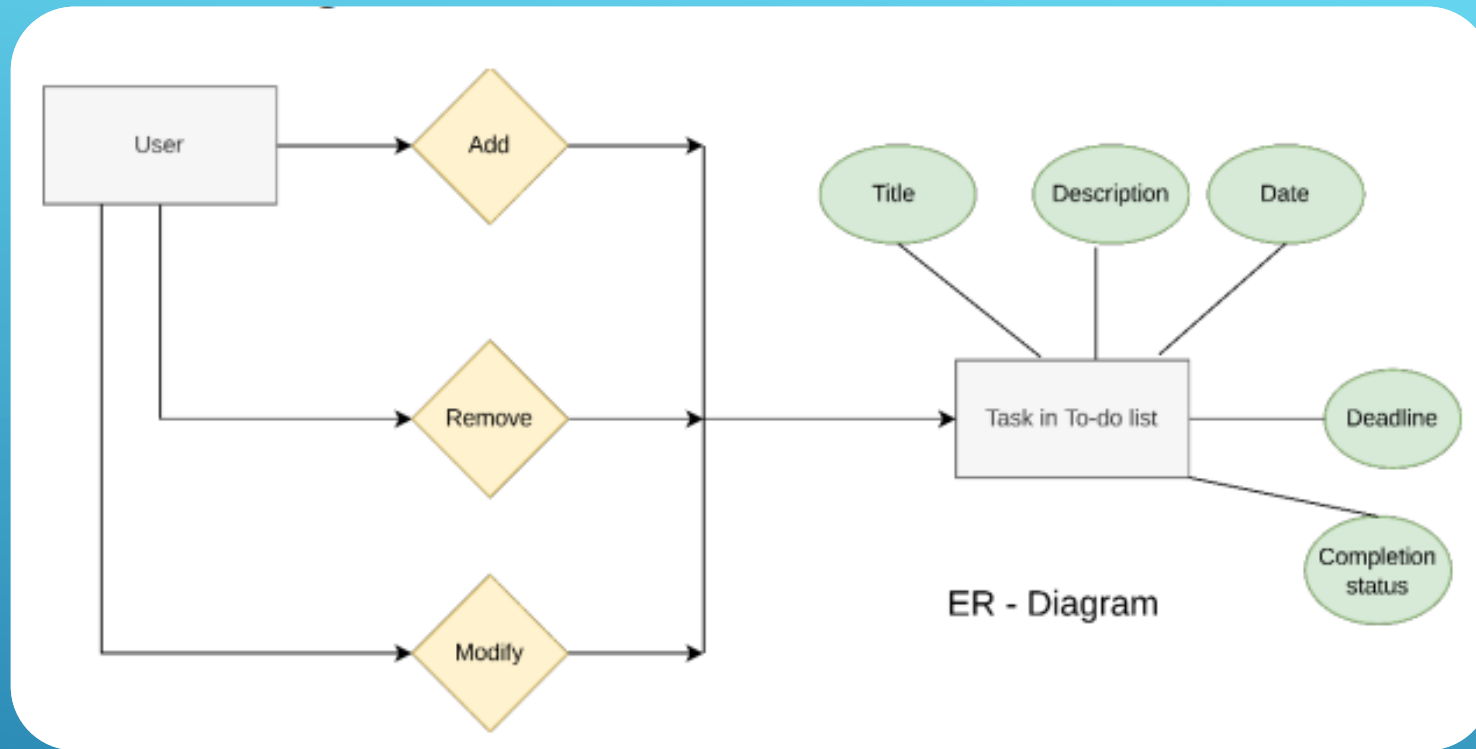


Fig : Entity-Relationship Diagram

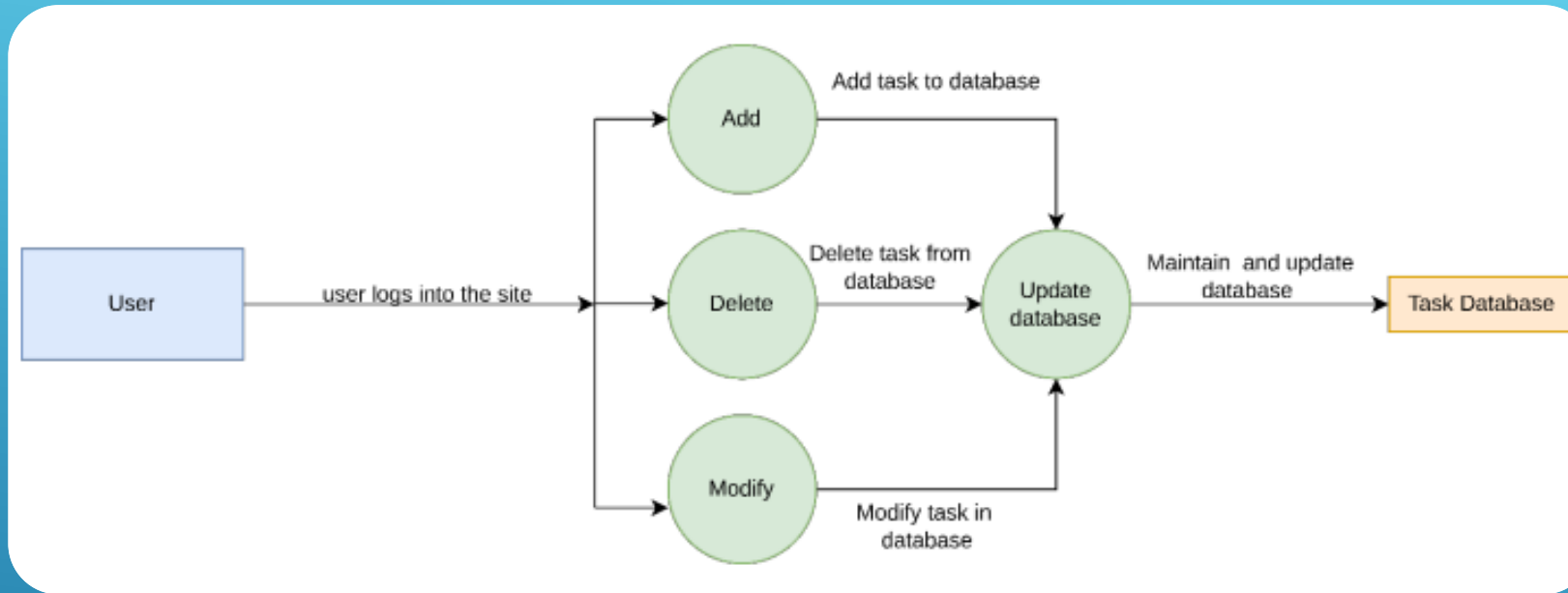


Fig : Data flow diagram

BOUNDARY CONDITIONS:

- Users can register/login.
- Each user will have the ability to create 10 tasks, add dates for targeted completion.
- Each user will have the ability to mark tasks as completed, when marked as completed the task will be highlighted with green color.

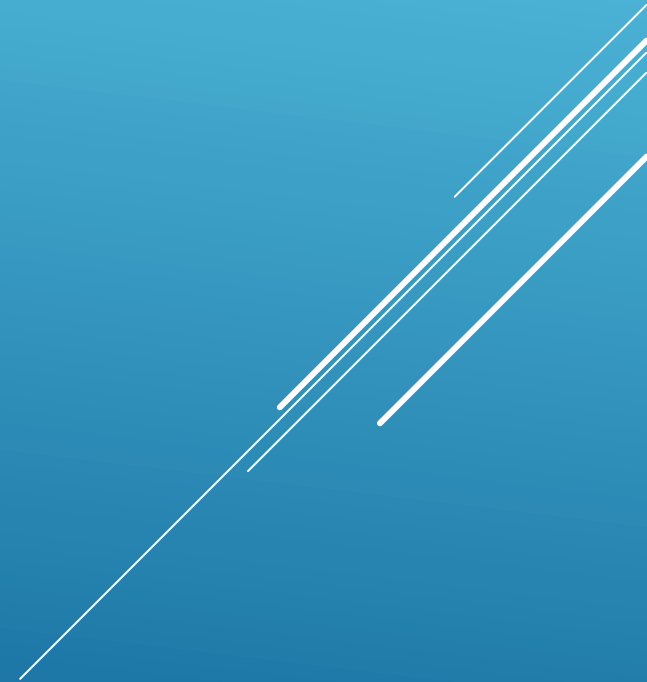
TECHNOLOGIES USED:

- Java 11
- 4.16.1 spring tool suite
- MySQL 8.0
- React js es6 version
- Css3
- Npm -v 16.71
- The main purpose of using these technologies is because they are more efficient and easy to work on them for this project



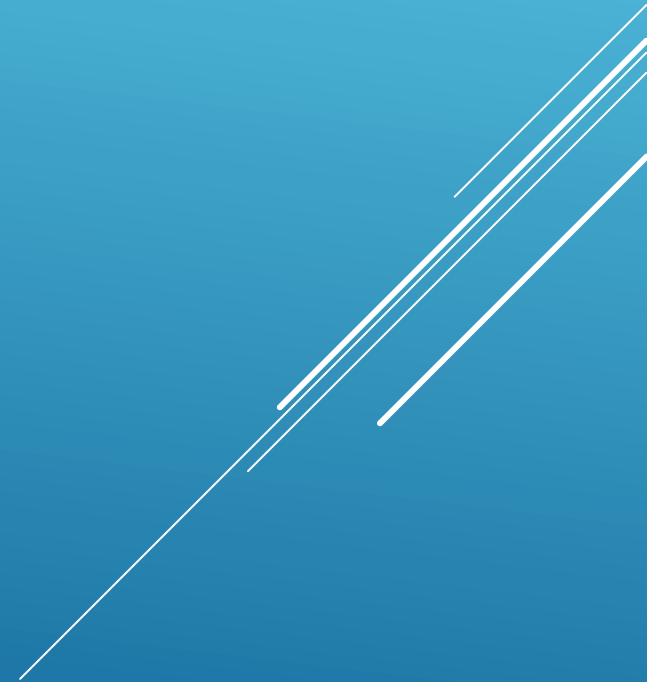
ONE FEATURE THAT WE WANT TO HIGHLIGHT:

- I want to highlight, that each user has their own login and there unique task displayed which can be marked as completed /uncompleted and shown in green color (highlight).

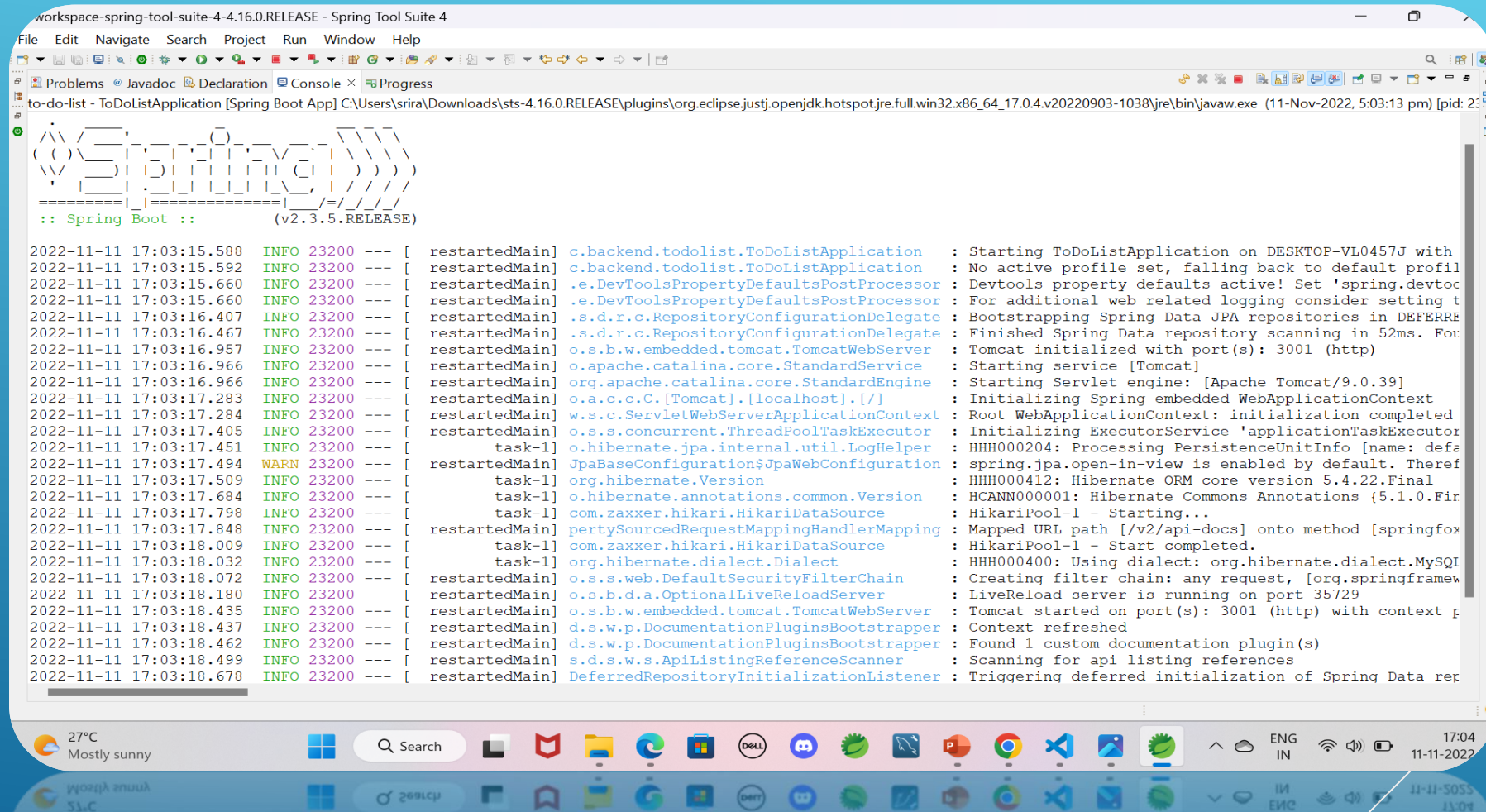


FEATURES THAT YOU WOULD ADD, OF PERMITTED MORE TIME:

- Tried to develop notification feature to the application but we have to learn more about the react js, So if time would permitted we have learnt more and tried more to implement it the application.



TESTING OF THE CODE:



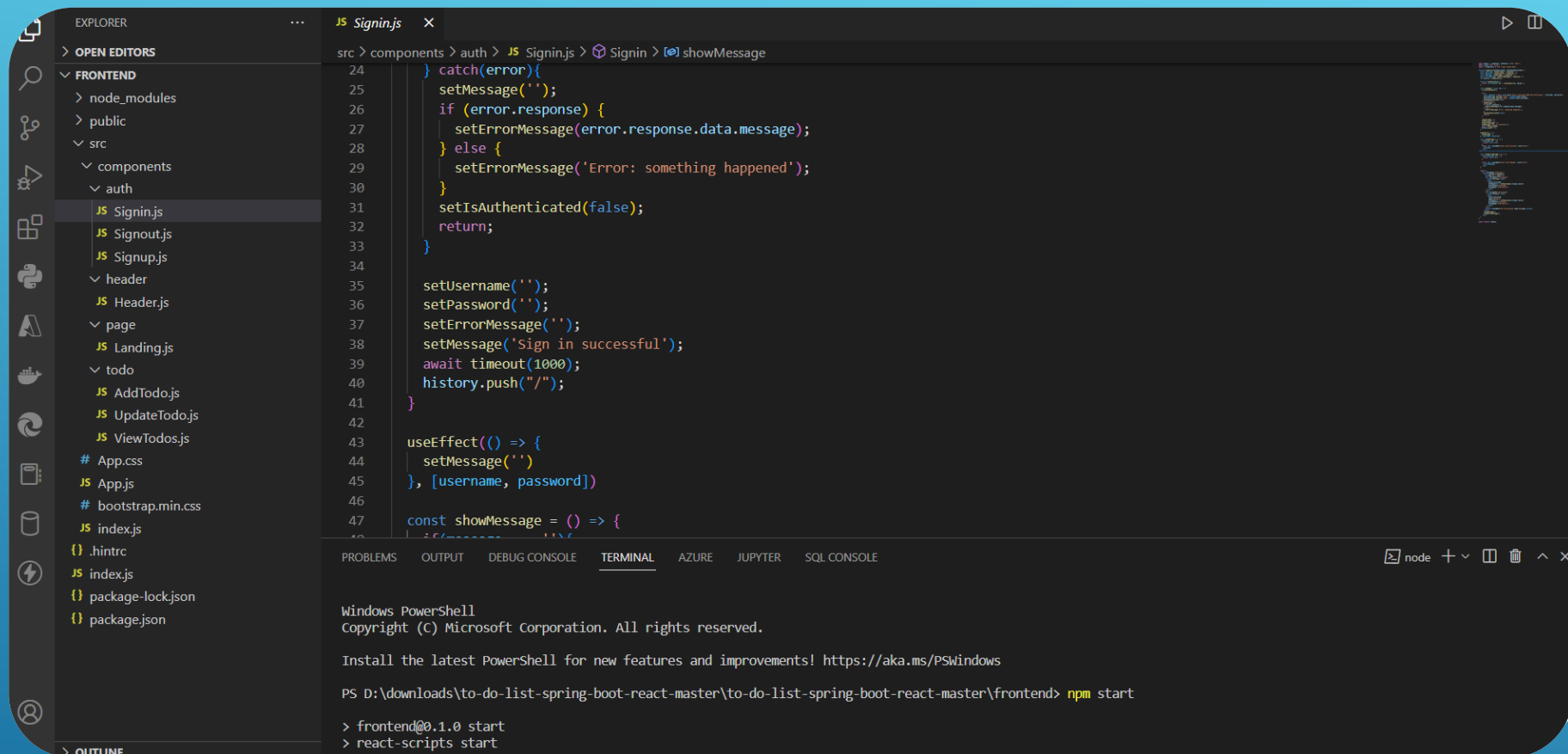
The screenshot displays the Spring Tool Suite 4 interface with the console view open. The application is 'to-do-list' (ToDoListApplication) running on Spring Boot (v2.3.5.RELEASE). The console output shows the application starting on DESKTOP-VL0457J with no active profile set, falling back to the default profile. It initializes the Spring Data JPA repositories in DEFERRED mode, scans for 52ms, and starts the Tomcat service on port 3001 (http). The application then starts the Servlet engine [Apache Tomcat/9.0.39] and initializes the Spring embedded WebApplicationContext. The Root WebApplicationContext initialization is completed, and the ExecutorService 'applicationTaskExecutor' is initialized. The application then processes the PersistenceUnitInfo [name: default] and enables spring.jpa.open-in-view by default. The Hibernate ORM core version 5.4.22.Final is loaded, and the Hibernate Commons Annotations {5.1.0.Final} are loaded. The HikariPool-1 is started, and the Mapped URL path [/v2/api-docs] is mapped onto method [springfox.swagger2.Swagger2Endpoint]. The HikariPool-1 start is completed. The application then uses the dialect: org.hibernate.dialect.MySQLDialect. The filter chain is created: any request, [org.springframework.web.filter.DefaultSecurityFilterChain]. The LiveReload server is running on port 35729. The Tomcat started on port(s): 3001 (http) with context path [/]. The context is refreshed. Found 1 custom documentation plugin(s). Scanning for api listing references. Triggering deferred initialization of Spring Data repositories.

```
workspace-spring-tool-suite-4-4.16.0.RELEASE - Spring Tool Suite 4
File Edit Navigate Search Project Run Window Help
Problems Javadoc Declaration Console x Progress
to-do-list - ToDoListApplication [Spring Boot App] C:\Users\srra\Downloads\sts-4.16.0.RELEASE\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_17.0.4.v20220903-1038\jre\bin\javaw.exe (11-Nov-2022, 5:03:13 pm) [pid: 2160]

:: Spring Boot :: (v2.3.5.RELEASE)

2022-11-11 17:03:15.588 INFO 23200 --- [ restartedMain] c.backend.todoist.ToDoListApplication : Starting ToDoListApplication on DESKTOP-VL0457J with
2022-11-11 17:03:15.592 INFO 23200 --- [ restartedMain] c.backend.todoist.ToDoListApplication : No active profile set, falling back to default profil
2022-11-11 17:03:15.660 INFO 23200 --- [ restartedMain] .e.DevToolsPropertyDefaultsPostProcessor : Devtools property defaults active! Set 'spring.devtool
2022-11-11 17:03:15.660 INFO 23200 --- [ restartedMain] .e.DevToolsPropertyDefaultsPostProcessor : For additional web related logging consider setting t
2022-11-11 17:03:16.407 INFO 23200 --- [ restartedMain] .s.d.r.c.RepositoryConfigurationDelegate : Bootstrapping Spring Data JPA repositories in DEFERRE
2022-11-11 17:03:16.467 INFO 23200 --- [ restartedMain] .s.d.r.c.RepositoryConfigurationDelegate : Finished Spring Data repository scanning in 52ms. Fou
2022-11-11 17:03:16.957 INFO 23200 --- [ restartedMain] o.s.b.w.embedded.tomcat.TomcatWebServer : Tomcat initialized with port(s): 3001 (http)
2022-11-11 17:03:16.966 INFO 23200 --- [ restartedMain] org.apache.catalina.core.StandardService : Starting service [Tomcat]
2022-11-11 17:03:16.966 INFO 23200 --- [ restartedMain] org.apache.catalina.core.StandardEngine : Starting Servlet engine: [Apache Tomcat/9.0.39]
2022-11-11 17:03:17.283 INFO 23200 --- [ restartedMain] o.a.c.c.C.[Tomcat].[localhost].[/] : Initializing Spring embedded WebApplicationContext
2022-11-11 17:03:17.284 INFO 23200 --- [ restartedMain] w.s.c.ServletWebServerApplicationContext : Root WebApplicationContext: initialization completed
2022-11-11 17:03:17.405 INFO 23200 --- [ restartedMain] o.s.s.concurrent.ThreadPoolTaskExecutor : Initializing ExecutorService 'applicationTaskExecutor'
2022-11-11 17:03:17.451 INFO 23200 --- [ task-1] o.hibernate.jpa.internal.util.LogHelper : HHH000204: Processing PersistenceUnitInfo [name: defe
2022-11-11 17:03:17.494 WARN 23200 --- [ restartedMain] JpaBaseConfiguration$JpaWebConfiguration : spring.jpa.open-in-view is enabled by default. Theref
2022-11-11 17:03:17.509 INFO 23200 --- [ task-1] org.hibernate.Version : HHH000412: Hibernate ORM core version 5.4.22.Final
2022-11-11 17:03:17.684 INFO 23200 --- [ task-1] o.hibernate.annotations.common.Version : HCANN000001: Hibernate Commons Annotations {5.1.0.Fir
2022-11-11 17:03:17.798 INFO 23200 --- [ task-1] com.zaxxer.hikari.HikariDataSource : HikariPool-1 - Starting...
2022-11-11 17:03:17.848 INFO 23200 --- [ restartedMain] pertySourcedRequestMappingHandlerMapping : Mapped URL path [/v2/api-docs] onto method [springfox
2022-11-11 17:03:18.009 INFO 23200 --- [ task-1] com.zaxxer.hikari.HikariDataSource : HikariPool-1 - Start completed.
2022-11-11 17:03:18.032 INFO 23200 --- [ task-1] org.hibernate.dialect.Dialect : HHH000400: Using dialect: org.hibernate.dialect.MySQL
2022-11-11 17:03:18.072 INFO 23200 --- [ restartedMain] o.s.s.web.DefaultSecurityFilterChain : Creating filter chain: any request, [org.springframework
2022-11-11 17:03:18.180 INFO 23200 --- [ restartedMain] o.s.b.d.a.OptionalLiveReloadServer : LiveReload server is running on port 35729
2022-11-11 17:03:18.435 INFO 23200 --- [ restartedMain] o.s.b.w.embedded.tomcat.TomcatWebServer : Tomcat started on port(s): 3001 (http) with context p
2022-11-11 17:03:18.437 INFO 23200 --- [ restartedMain] d.s.w.p.DocumentationPluginsBootstrapper : Context refreshed
2022-11-11 17:03:18.462 INFO 23200 --- [ restartedMain] d.s.w.p.DocumentationPluginsBootstrapper : Found 1 custom documentation plugin(s)
2022-11-11 17:03:18.499 INFO 23200 --- [ restartedMain] s.d.s.w.s.ApiListingReferenceScanner : Scanning for api listing references
2022-11-11 17:03:18.678 INFO 23200 --- [ restartedMain] DeferredRepositoryInitializationListene : Triggering deferred initialization of Spring Data rep
```

Test code in Spring Boot



Test code in VS Code

Navigator: day1*

SCHEMAS

Filter objects

- boomi
- employee_management_system
- login
- sys
- test
- to_do
- to_do_list**
 - Tables
 - Views
 - Stored Procedures
 - Functions
- to_do_list_app
- userdb

286 • `select* from users;`
287 • `select* from todos;`
288 • `select* from member;`
289 • `use to_do_list;`
290 • `show tables;`
291 • `select* from user;`
292 • `select* from todo;`

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content:

	id	is_completed	target_date	title	username
▶	3	1	2022-11-12 05:30:00	to learn google cloud	y4y4y
	4	0	2022-11-24 05:30:00	to learn react.js	y4y4y
	5	0	2022-11-16 05:30:00	to do task 3	y4y4y
*	NULL	NULL	NULL	NULL	NULL

Test code in WorkBench

LESSONS LEARNT:

During this project we have faced some errors during runtime in Spring Boot and React.js.

- When the code is compiled in spring boot we got error which is about URL and class path not found so for that we all together discussed about it with our trainer and solved it.
- And React.js also the code didn't got compiled and we shared our thoughts and made it to work.

ANY SPECIFIC TOOLS, METHODS:

Methods :

- Jwt method for user authentication.
- Web security configuration for password encoding.
- Exception handling method for handling exceptions like user already exists, invalid password.
- Crud JPA repository method for create, read ,update and delete the tasks (to do)and users.

Tools:

- **ReactJS** : React (also known as React.js or ReactJS) is a free and open source front-end JavaScript library for building user interfaces based on UI components.
- **Visual Studio Code** : Visual Studio Code, also commonly referred to as VS Code, is a source code. Features include support for debugging, syntax highlighting, intelligent code completion, snippets, code refactoring, and embedded Git.
- **Workbench**: MySQL Workbench is a visual database design tool that integrates SQL development, administration, database design, creation and maintenance into a single integrated development environment for the MySQL database system.
- **Spring Tool Suite (STS)**: STS is an Eclipse-based development environment that is customized for the development of Spring applications. It provides a ready-to-use environment to implement, debug, run and deploy your applications. It also includes integration for Pivotal tc Server, Pivotal Cloud Foundry, Git, Maven and AspectJ.

THANK YOU...

