

CSCI 5308 – Advanced Topics in Software Development

Group 18 – Budget Surfing

External Dependencies Document

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External Dependencies Configuration:

Where to find configurations?

All external key value pairs are stored in the application.properties file inside resources. The following screenshot is a visual aid to find the location.

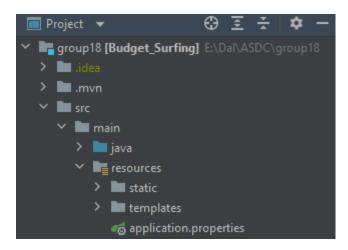


Figure 1 Configuration location

Email Sending

Currently, the project uses "spring-boot-starter-mail" to send emails. This requires a valid smtp configuration to act as the email server. We are using the free SMTP service by Gmail for this purpose. One online guide available to setup Gmail for SMTP can be found at https://www.jotform.com/help/392-how-to-use-your-gmail-account-as-your-email-sender-via-smtp/ [1].

Configuration for settings are stored in application.properties as seen in the following screenshot.

```
spring.mail.host=smtp.gmail.com
spring.mail.port=587
spring.mail.username=gondaliyaparth12345@gmail.com
spring.mail.password=tzowjxmrnzudwxqi
spring.mail.properties.mail.smtp.auth=true
spring.mail.properties.mail.smtp.starttls.enable=true
```

Figure 2 Email configuration

This dependency is used in user module (com.group18.listener.RegistrationListener) and notifications module (com.group18.listener.TripListener).

Payments (Stripe)

This project uses stripe-java to act as the external payment processor. As not actual payments are carried out at the moment, we have configured to Stripe's test environment to prevent actual charges occurring. For initial generation of Stripe, a user will have to:

- 1. Sign up for Stripe account
- 2. Obtain developer keys by going to https://dashboard.stripe.com/test/apikeys
- 3. Switch Live and Test toggle as required for correct environment keys

Configurations for the Stripe public key and secret key are stored in application.properties as shown below.

```
STRIPE_PUBLIC_KEY=pk_test_51KgDpZGWjFP75A0d8NsU2R<u>Vzgb0GKAVY</u>7hok6faZ0Jw8ldSTktP48bbnWT103A1I9U7jFPmvYGIAsDPXzPZN9
STRIPE_SECRET_KEY=sk_test_51KgDpZGWjFP75A0dRSJvfCkeZ46Go1<u>Rhpr</u>OfGNsW1<u>xodoc</u>96y9B4c<u>Nepb</u>XDPtV3IMhPk93<u>DPHM</u>QsARAjgDKfs
```

Figure 3 Payment configuration

This dependency is used for the payments module and is found in at com.group18.serviceImpl.StripeServiceImpl

Database

This project uses "spring-boot-starter-data-jpa" and "mysql-connector-java" to connect our spring boot project with a MySQL database. Update database property inside *application.properties* located inside resources to required database if needed (default Dalhousie remote server).

```
spring.datasource.url=jdbc:mysql://db-5308.cs.dal.ca:3300/<u>CSCI</u>5308_18_<u>DEVINT</u>?useUnicode=true&useJDBCCompliantTimezoneShift=true&useLegacyDatetimeCode=false&serverTimezone=UTC spring.datasource.username=<u>CSCI</u>5308_18_<u>DEVINT</u>_USER spring.datasource.password+<u>Hugoodaeheidaobo</u> spring.datasource.driver-class-name=com.aysql.cj.jdbc.Driver spring.jpa.properties.hibernate.dialect=org.hibernate.dialect-org.hibernate.dialect.MySqL5Dialect spring.jpa.hibernate.ddl-auto=update
```

Figure 4 Database configuration

For a first start of new database via spring, the following property should be used *spring.jpa.hibernate.ddl-auto=create*. Any subsequent starts should change the property to "update" instead of "create".

	L queries need to be executed on a fresh database	server as they				
consist of system values used by the project.						
INSERT INTO ROLES VALUES (1,'ROLE_HOST');						
INSERT INTO ROLES VALUES (1, 'ROLE_TRAVELLER');						

Other Spring Project Dependencies:

Dependency	Reason			
spring-boot-starter-web	Used to build REST application with			
	embedded Tomcat server			
spring-boot-starter-web-services	Starter for Spring web services			
spring-boot-starter-security	Used for Spring security enforcement			
jjwt	Add JSON Web Token support			
modelmapper	Used for object mapping			
spring-boot-devtools	Developer tools for Spring Boot			
spring-boot-starter-test	Used to test application			
spring-boot-starter-data-jpa	For using JPA with Hibernate			
mysql-connector-java	JDBC driver for MySQL			
spring-boot-starter-mail	Starter for Java mail and sending email			
spring-boot-starter-thymeleaf	Render Thymeleaf views			
springdoc-openapi-ui	Used for API documentation			
junit-jupiter	Junit 5 for testing			
mockito-core	For mocking objects			
stripe-java	Handling stripe integration			

[1] "How to Use Your Gmail Account as Your Email Sender via SMTP," Jotform							
[Online]. Available at: https://www.jotform.com/help/392-how-to-use-your-gmail-account-as-your-email-sender-via-smtp/ [Accessed: April 5, 2022].							