

SCHOOL OF COMPUTING (SoC) ST0503 Back-end Web Development 2021/2022 SEMESTER 2 ASSIGNMENT 1

Admission Number: P2100803

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Class: DAAA/FT/1B/01

Course: Diploma in Applied AI and Analytics

Content Page:

- 1. Instructions on how to setup the project on the lecturer's laptop
- 2. MYSQL database tables created and their linkage (including foreign keys)
- 3. Screenshots as proof of all 12 successful APIs in chronogical order (inclusive of advanced feature APIs

1. Instructions on how to set up the project:

- 1. Open MYSql Workbench and open the .sql script file from the downloaded project folder in the workbench. Run the file by clicking the first lightning symbol in the workspace area and refresh the schemas on the left to see the new database
- 2. Double click on the database 'sp_it' and then double click on 'Tables' to see the various table names. To view the actual tables double click on the table names and click the first lightning icon in the workspace on the left again
- 3. Open Postman and go to import to import the postman path collection file from the downloaded project folder. You can test all APIs from here more conveniently
- 4. Open VScode and right click on the main folder which was download and click integrated terminal
- 5. Once terminal is open type 'npm start' and press enter. The server will start running in the terminal.
- 6. From here you can test all the endpoints. I recommend that you have postman and mysql workbench open side by side so you can see the changes happening in real time for POST, PUT, GET and DELETE.

2. Tables in the SQL Workbench to support functionalities such as user registration, publication of product info, insertion of products and user reviews.

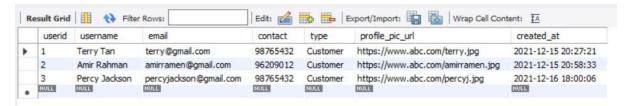
Context:

Background

SP IT! is considering setting up an online e-store to allow the public to purchase IT products it is selling. Before it launches its online e-store, it requires a web application to computerize its inventory management module and also allow the public to view the product details online.

As such, SP IT! has tasked you to design the backend API Specs the website. The API specs would support functionalities such as user registration, publication of product info, insertion of products and user reviews

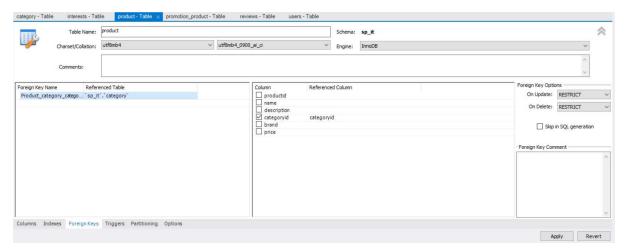
User Table for user registration:



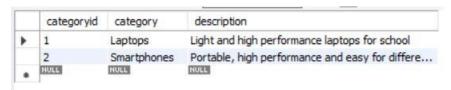
Product Table for publication of product:

	productid	name	description	categoryid	brand	price
•	10	SP AMD Ryzen 3600 Laptop	Best Laptop	1	SP IT!	1858
	11	Oppo Find X Pro 3	Best Phone	1	SP IT!	2000
	NULL	HULL	NULL	NULL	NULL	NULL

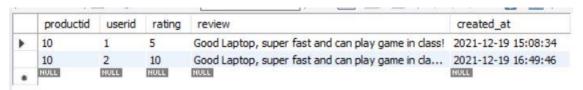
Foreign Key for categoryid to category table:



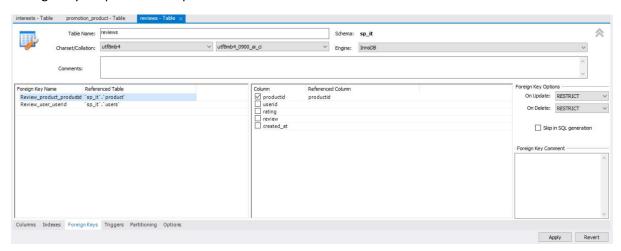
Category Table for category of devices:



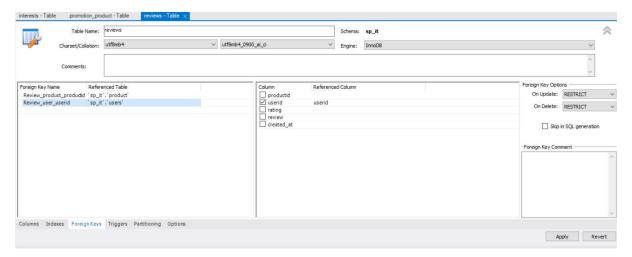
Reviews Table for reviews from users on the various products:



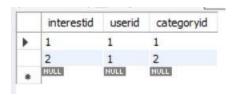
Foreign Key for productid to product table:



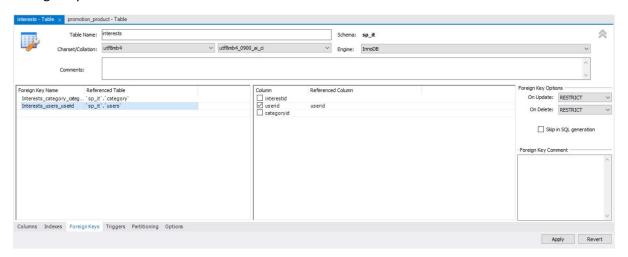
Foreign Key for userid to user table:



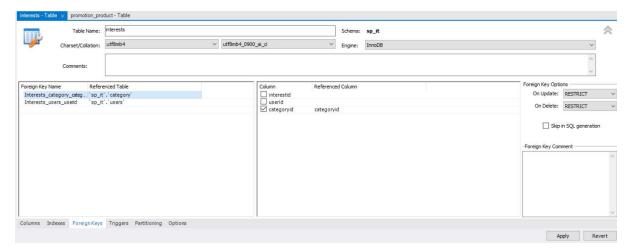
Interests Table for users who are interested in multiple categories:



Foreign key for userid to user table:

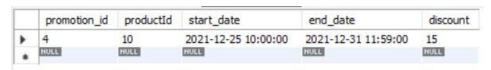


Foreign key for categoryid to category table:

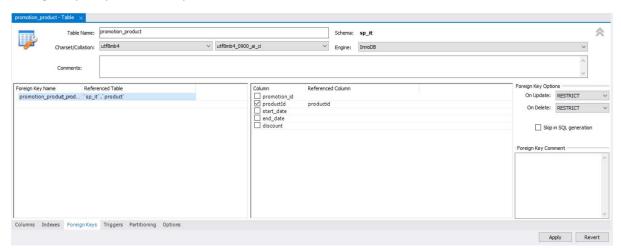


Advanced Feature:

Promotion_product Table for the promotion period and discount for the respective products:



Foreign Key for productid to product table:



3. Proof that the endpoints work with the sql database when tested on postman.

Endpoint 1

