Routing Table Category **Chai Juan Yang 33203318**

Name	Endpoints	HTTP TYPE	Description
Add Category	/add-category	post	Adds a new category into the collection. Redirects to invalid-data component if user input includes unrecognised symbols.
List Categories	/list-categories	get	Lists all the categories added in the collection.
Delete Categories	/delete-categories/:categoryID	delete	Obtains the category ID passed from pathname parameter, finds the object with the same category ID and deletes it from the collection.
Display Categories	/display-category/:categoryId	get	Obtains the category ID passed from pathname parameter. It will find the object from the collection and get it's attributes for display
Update Category	/update-category	post	Users select an object to be updated. It will be sent to find the object, and update based on the user's requirements. Invalid data given would be redirected to invalid-data component
Invalid Data	/invalid-data	-	Invalid data page
Footer	/footer	-	Footer component
Text-to-speech	/text-to-speech	-	Text to speech component that takes user input string and convert it to an audio file
Stats-G1	/stats-g1	get	Stats component that shows number of categories in the database
Page Not Found	**	-	Brings any incorrect link or path names to Page Not Found component.

```
const routes: Routes = [
  {path :"add-category", component: AddCategoryComponent},
  {path :"list-categories", component: ListCategoriesComponent},
  {path :"delete-categories", component: DeleteCategoriesComponent},
  {path :"update-category", component: UpdateCategoryComponent},
  {path :"display-category/:categoryId", component: DisplayCategoryComponent},
  {path :"invalid-data", component: InvalidDataComponent},
  {path :"stats-g1", component: StatsG1Component},
  {path :"text-to-speech", component: TextToSpeechComponent},
  {path: "", redirectTo: "/list-categories", pathMatch: "full" },
  {path :"**", component: PageNotFoundComponent},
]
```

Backend Endpoints

Add Category	/add-category	post	Adds a new category into the collection. Redirects to invalid-data component if user input includes unrecognised symbols.
List Categories	/list-categories	get	Lists all the categories added in the collection.
Delete Categories	/delete-categories/:categoryID	delete	Obtains the category ID passed from pathname parameter, finds the object with the same category ID and deletes it from the collection.
Display Categories	/display-category/:categoryId	get	Obtains the category ID passed from pathname parameter. It will find the object from the collection and get it's attributes for display
Update Category	/update-category	post	Users select an object to be updated. It will be sent to find the object, and update based on the user's requirements. Invalid data given would be redirected to invalid-data component
Stats-G1	/stats-g1	get	Stats component that shows number of categories in the database

```
ema_angular > JS app.js > ...
 90
 91    app.post("/add-category", categoryCont.createCategory);
 92
 93    app.get("/list-categories", categoryCont.getAllCategory);
 94
 95    app.delete("/delete-categories/:categoryId", categoryCont.deleteCategorybyId);
 96
 97    app.put("/update-category", categoryCont.updateCategorybyId);
 98
 99    app.get("/display-category/:categoryId", categoryCont.getCategoryDisplay);
100
101    app.get("/stats-g1", stats.getOneOperation);
```

Steps

Start running the app by using ng build –watch and nodemon app.js on separate terminals but simultaneously. The app checks if an operation instance has been created. If there is an existing instance, it will be used to serve stats-g1. First of all, the add category works the same way as in Assignment 2. It redirects users to invalid-data component page if any invalid characters are found in the string (only alphanumerics). Once addition is successful , redirect to list-categories page. List-categories page lists all objects (categories) in the collection. Each row contains a button to view the category details, which is the display category component. It is used to show each attribute of the category, and also show events that are categorised under this category. However, this app is separated from the events component, which means this part would be empty.

Moving on, to remove any objects from the collection, the delete component page has a button to delete that item in each row of objects. Other than that, there is a component to update any category object. In this page, choose an object to be updated through a button, then enter the inputs through the form and submit. Upon successful updates, it will be redirected to the list category page, else, it will redirect to the invalid data page if there are any invalid characters detected in the given input. The next component stats is to view the category and event counts. Since this app is separated from events, only category counts will be shown. The last component is text-to-speech. It will accept user input and convert the string to an audio file so that users can listen to the text they provided.