

API

In the prototype developing phase, we are using mock-up data api for our project. All the data are encoded from the 2 objects of our project which is Task and Time(Time is the children table of the Task), the URL for our api is:

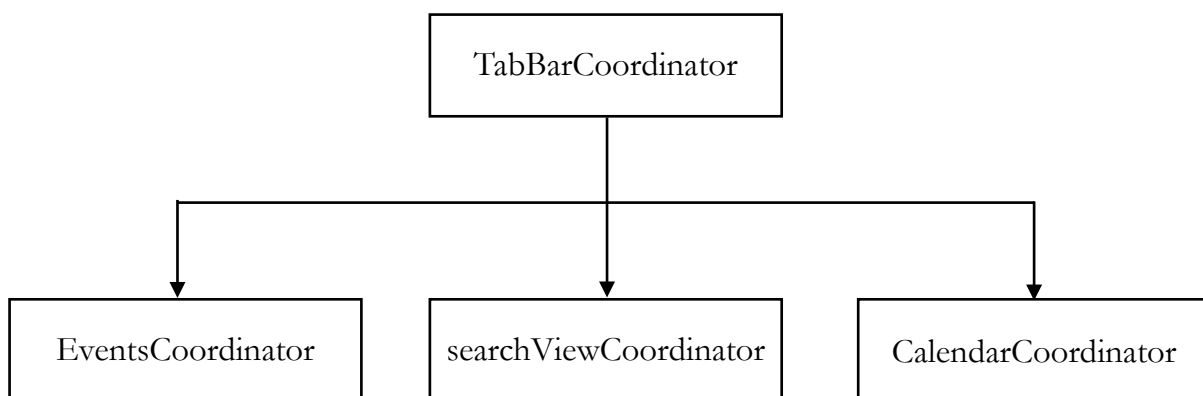
<https://5f54c18c39221c00167fa9cb.mockapi.io/tasks/all/tasks>

The api only has all the mock tasks of our APP, and all the data are stored in the path coordinator-*'TabBarCoordinator.swift'*, they are allowed to be added, deleted, retrieved and edited. In case of the network or api issue, we hardcode all the data in the file. However it also has an option to load the Json data from api and decode it to Task objects.

We don't have any transport security at this phase, because the tasks are all mock up, there is no need to edit or update the database. But in the future, we will write a server with socket programming, which will enable the update of the tasks from a user.

Coordinator

The coordinator pattern is implemented as a reflection to the design Patterns requirement. The main coordinator pattern for our project is shown in the following figure:



The coordinators-*'TabBarCoordinator.swift'* is used to implement the tab bar function, the user can shift from events, search and calendar by touching the buttons on the tab bar. While coordinators-*'EventsCoordinator.swift'* and -*'searchViewCoordinator.swift'* are used to show the main page of the 2 tabs, if the user wants to edit and delete the events or view the master page of an event. These 2 coordinators can make the controller jump from the main page (controller-*'EventViewController.swift'*, controller-*'SearchViewController.swift'*) to the master page (controller-*'DetailsTableViewController.swift'*) or edit page (*'CreateTask-TableViewController.swift'*) of an event.

There is another coordinators-*'calenderCoordinator.swift'*, which is only used to display the calendar in the prototype development phase.

The advantage of the coordinator pattern is that it makes our project more flexible and can make the code reuse easier. If we want to change the connection of pages, we only need to change the code, rather than change it on the storyboard which could be very chaotic.