

#Overview

Today I implemented a full **CRUD system** for the three core entities in the application:

- **Subjects**
- **Assignments**
- **Tasks**

This includes creating, editing, viewing details, and deleting records, as well as connecting all screens using Expo Router.

#ImplementedFeatures

#Subjects

Created full CRUD flow:

- 'createSubject.tsx'
- 'editSubject.tsx'
- 'viewDetailsSubject.tsx'

Functionality:

- Create new subjects
- Edit existing subjects
- View subject details
- Delete subjects

Relationships:

- Subjects act as the top-level entity
- Assignments can optionally be linked to a subject via 'sId'
- Subjects are displayed:
 - globally ('subjects.tsx')
 - or standalone ('viewDetailsSubjects.tsx')

#Assignments

Created full CRUD flow:

- 'createAssignment.tsx'
- 'editAssignment.tsx'
- 'viewDetailsAssignment.tsx'

Functionality:

- Create assignments (with optional 'sId')
- Edit assignments
- View assignment details
- Delete assignments

Relationships:

- Assignments can exist:
 - linked to a subject ('sId')
 - or standalone ('sId = null')
- Assignments are displayed:
 - globally ('assignments.tsx')
 - or within a subject ('viewDetailsSubject.tsx')
 - or standalone ('viewDetailsAssignment.tsx')

#Tasks

Created full CRUD flow:

- 'createTask.tsx'
- 'editTask.tsx'
- 'viewDetailsTask.tsx'

Functionality:

- Create tasks
- Edit tasks
- View task details
- Delete tasks

****Relationships:****

- Tasks are linked to assignments via 'aId'
- Tasks are accessed through assignment detail pages
- Assignments are displayed:
 - globally ('tasks.tsx')
 - or within an assignment ('viewDetailsAssignment.tsx')
 - or standalone ('viewDetailsTask.tsx')

#RoutingStructure

#TopLevelScreens

- 'subjects.tsx' â list of all subjects
- 'assignments.tsx' â list of all assignments
- 'tasks.tsx' â list of all tasks
- 'index.tsx' â pre-existing home screen

#DataModel

#Subject

- 'sId'
- 'title'
- 'description'
- 'isActive'
- 'lastChanged'
- 'uId'

#Assignment

- 'aId'
- 'title'
- 'description'
- 'deadline'
- 'isCompleted'
- 'lastChanged'
- 'uId'
- 'sId'

#Task

- 'tId'
- 'title'
- 'description'
- 'isCompleted'
- 'lastChanged'
- 'uId'
- 'aId'