

Project Structure

The channels project is structured in five different packages:

Main,app,services,domain and utils.

Main package is the entry point for the project which will call app package functions.

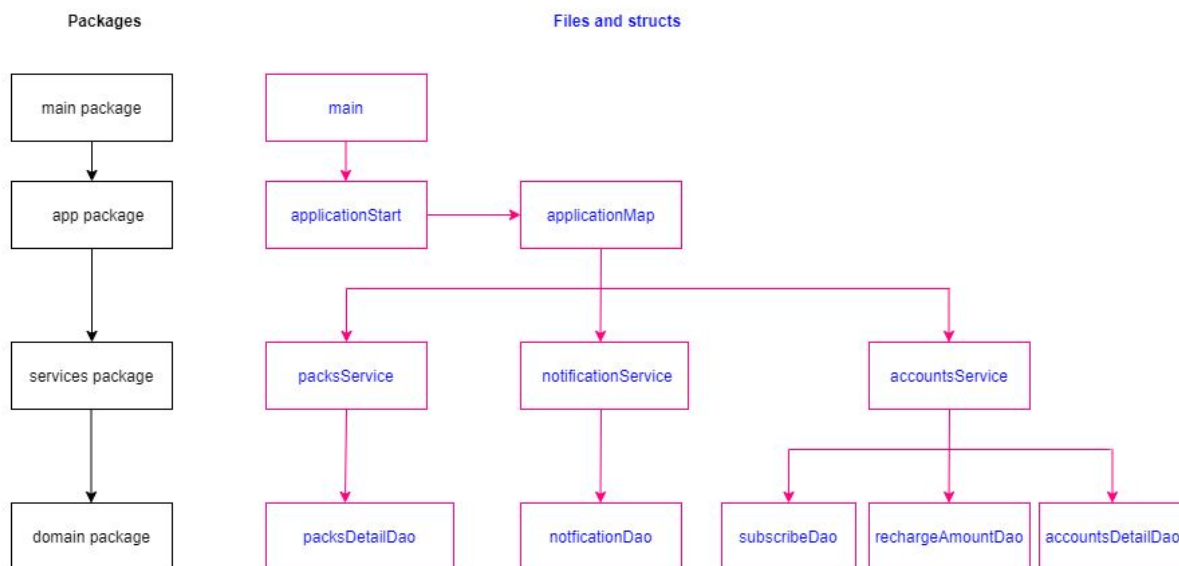
The app package will use the services package and use its different services such account_service,Notification_service and packs_service.

The services package will be dependent on domain package for its operations.

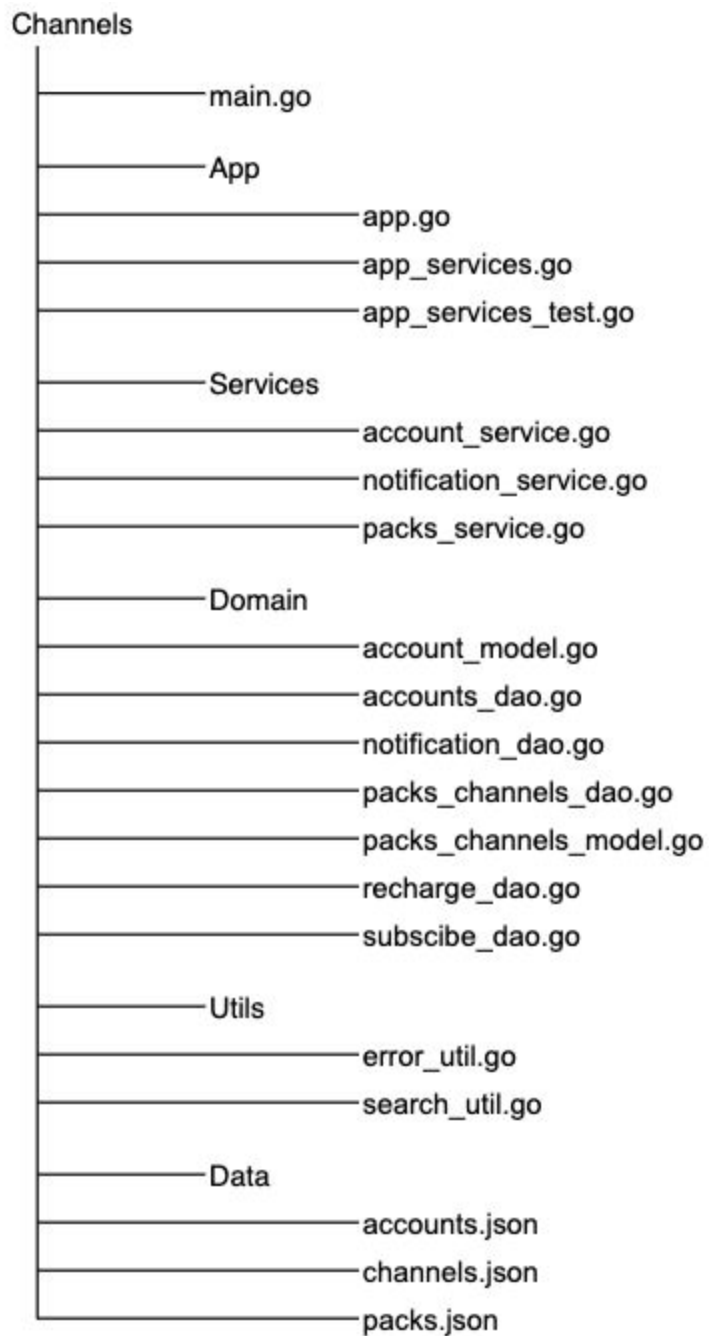
Domain package will deals with all the CRUD operation.Doman file will use utils package and will also use the data folder present in project structure.This data folder is having json files.

In case of our project we do not have any DB so i used json file to store and retrieve data.Json file used to avoid usage of any 3rd party library and make the code portable,so that it can run easily on any one's PC without much effort.

Following diagram represents relation between different files and packages:-



Following diagram represents the project structure tree



Steps to run the project:

- 1)Copy project to \$GOPATH/src/github.com
- 2)Open terminal->Go to project path->Type go run main.go
- 3)This will run the application and will show the following console output:

Welcome to SatTV

1. View account balance and current subscription
2. Recharge Account
3. View available packs and channels
4. Subscribe to base packs
5. Add channels to an existing subscription
6. Update email and phone number for notifications
7. Exit

You can use any option and the application will perform that task for you.

To make data persistent and allow different user to use it,I added one more input account Id in all of the option

Note:Please try to use the application on windows platform.Its developed and tested on windows OS.

How to use the application

Run the application as mentioned in previous section and use options in following ways:-

Option 1.

It will ask for your accountId. Just enter some random id such as "prakhars".
If accountId is subscribed it will show the balance and subscribed pack.
If accountId is not subscribed it will show the balance and "Not Subscribed".

Example:

Account balance is 100 Rs.

Current subscription: Gold (If the user has not yet subscribed show "Not subscribed")

Option 2.

I will ask for recharge amount and account Id.
If user is subscribed it will update the user's account balance and show the updated balance and if user is not subscribed it will display a message that user not subscribed.

Example:

Enter the amount to recharge: 500

Enter your account Id: prakhars

Recharge completed successfully. Current balance is 600

Option 3.

It will display the available packs and channels.

Example:

Available packs for subscription

Silver pack: Zee, Sony, Star Plus: 50 Rs.

Gold Pack: Zee, Sony, Star Plus, Discovery, NatGeo: 100 Rs.

Available channels for subscription

Zee: 10 Rs, Sony: 15 Rs, Star Plus: 20 Rs, Discovery: 10 Rs, NatGeo: 20 Rs.

Option 4.

It will take 3 inputs:

1st input :Pack which user wants to subscribe.

2nd input :Number of months for which user wants to subscribe.

3rd input :Account Id of user.

If account Id is already existing then i will check for balance,If sufficient balance is there then it will subscribe user to pack else it will show message not sufficient balance.

If account Id is not existing then it will check that cost of subscription is greater the 100 Rs or not.I cost is less then or equal to 100 Rs it will subscribe the user else it will show message the not sufficient balance.

If months is greater then eqaul to 3 then it will also give 10 percent discount to user

Also if user has updated his email and phone number then it will show message that notification sent successfully,else it will show message that update email and phone no to get the notifications.

Example:

Enter the Pack you wish to subscribe: (Silver: 'S', Gold: 'G'): G

Enter the months: 3

Enter you account ID:prakhars

You have successfully subscribed the following pack - Gold

Monthly price: 100 Rs.

No of months: 3

Subscription Amount: 300 Rs.

Discount applied: 30 Rs.

Final Price after discount: 270 Rs

Email notification sent successfully

SMS notification sent successfully

Option 5.

This will take 2 input params:

1st input: Channel which user want to add.

2nd input: User's account Id.

If users account id doesn't has the channel he requested for then it will add the add channel,else it will show message channel already present.I will also show the available balance after adding channel.

Note:As account id subscribed to gold pack has all the available channel then i will not add any channel for him.For account id subscribed to silver pack already three channels are present,so on adding those three channels it will show previous message.

Example:

Enter channel name to add : Discovery

Enter your account Id: prakhars

Channels added successfully.
Account balance: 300 Rs.

Option 6.

This will take 2 input params:

1st input: User's email id.

1st input: User's phone number.

3rd input: User's account Id.

This will update user's email and phone number.

Example:

Enter the email: prakhars[@gmail.com](mailto:prakhars@gmail.com)

Enter phone: 1234567890

Enter your account Id: prakhars

Email and Phone updated successfully.

Option 7.

This will exit the application.