Git Project Initialization

# Git init (project shuru krne k liye);

Is command ko vs code k terminal main chlane se ye aik empty git reposity localy create krta hai

## Syntax;-

git init

Git Stash

# Git stash(create temporary storage lika a clipboard);

Is command ko istmal krne se aik temporary storage create ho jati hai jis main hm apna data aik clipboard ki tarha save kr sakte hain aur ager hm branch ko change kr k dusri branch par ja kr wapis osi branch main a jaein gay toh b hamara data lost nahi hoga

## Syntax;-

git stash

# Git stash list(stash saved list check krne k liye);

Is command ko istmal krne se jo data hm ne stash main save kiya hoga os ki info a jaye gi

## Syntax;-

git stash list

# Git stash pop(last stash ki changes ko apply kr k stash delete kr deta hai);

Is command ko istmal krne se jo last stash ki changes hum ne save ki hongi who aa jaein gi aur last stash delete ho jaye ga

## Syntax;-

git stash pop

# Git stash save <comment>(ye stash ko desciptive msg k sath save krta hai);

Is command ko istmal krne se hm apni maszi k coment se stash ko save kr sakte hai

## Syntax;-

git stash stash\_comment\_msg

# Git stash apply “stash@{index}” (jis stash ko apply kr na ye os ko hi apply krta hai);

Is command ko istmal krne se hm git list se stash ka naam le kr os ko apply kr sakte hain

## Syntax;-

git stash apply “stash@{0}”

OR

git stash apply stash@{1}

# Git stash show(show changes info);

Is command ko istmal kr k hm ye dekh sakte hain k stash main kaha kaha change kiya hai

## Syntax;-

git stash show

# Git stash show -p “stash{index}”(show changes in specific file);

Is command ko istmal kr k hm apni marzi ki file main ye dekh sakte hain k stash main konsi file main kya kya change kiya hai

## Syntax;-

git stash show -p “stash@{0}”

OR

git stash show -p stash@{1}

# Git stash show -p(show changes in current file);

Is command ko istmal kr k hm ye dekh sakte hain k stash main konsi file main kya kya change kiya hai

## Syntax;-

git stash show -p

# Git stash drop “stash{index}”(stash ko delete krne k liye);

Is command ko istmal kr k hm stash list se os stash ka index dekh kr os ko delete kr sakte hain

## Syntax;-

git stash drop “stash@{0}”

OR

git stash drop stash@{1}

# Git stash clear (stash temporary storage ko clean krne k liye);

Is command ko istmal ko istmal stash ko khatam kr sakte hian jis se sara stash storage clean ho jaye ga

Syntax

git stash clear

Git Staging area

# Git add . (sari files ko add krne k liye);

Git init k badh ye command chalani hai is se sari unstage file add ho jaein gi aur files k akhir par Capial A likha a jaye ga

## Syntax;-

git add . (is se sari file add hotai hain)

git add ‘file name’ (file\_name ki jaga file ka naam likhne se sirf wohi file upload hoti hai)

Git local Repositry

# Git commit -m ”anything type you know about your project” (files ko finalize krta hai);

Ye files ko commit krta hai yani ka files ko finalize krta hai

## Syntax;-

git commit -m “yaha comment likhna hai”

# Git reset --hard head~1 (last commit ko delete krne k liye);

Ye commant jo hm ne commit ki hoti hai os ko change krta hai ager command main head~ k badh apni marzi se number of commit bata di jaein toh otni hi commits delete hongi

## Syntax;-

git reset –hard head~1

# Git log (Saved commits history)

Jo saved commits hoti hain os ki history batati hai ye command

## Syntax;-

git log

# Git reflog (deleted and saved commits history)

Kisi b traha ki commit ho yani deleted b ho os ki detail ki history is command k zariye dekhi ja sakti hai

## Syntax;-

git reflog

# Git reset --soft head~1 (current file ilawa sab udo)

Ye command current\_file(working open file) k ilawa sari undo kr deta hai

## Syntax;-

git reset --soft head~

# Git reset --hard head~ (ye git checkout ki tarha hi kaam krta hai)

Ye uncommit code ki sari file ko UNDO krna ho toh os k liye b istaml kr sakte hai

## Syntax;-

git reset --hard head~

# Git reset head~ (ye git checkout ki tarha hi kaam krta hai)

Ager uncommit code ki sari file ko UNDO krna ho toh os k liye b istaml kr sakte hai

## Syntax;-

git reset head~1

# git reset --hard commit\_hash (deleted commit ko wapis lane k liye)

ager galti se commit delete ho jaye toh os k liye sab se pehel jo nich GIT REFLOG command likhi hai os ko run krna hai aur os k badh deleted commit ka commit\_hash copy krna hai

syntax:- git reflog

os k badh copy kiya howa commit\_hash jo hai os ko --HARD k bad paste kr k enter kr dena hai

syntax:- git reset --hard 299fd04(ye jo numbers hain is ko commit\_hash kehte hai)

Git branches

# Git checkout -b <branch\_name> (branch create krne k liye);

Is command k istmal se new branch create hoti hai

## Syntax;-

git checkout -b branch\_name

# Git config --global alias.rename 'branch -m'(branch rename krne k liye);

Jis branch ka naam change krna ho os branch par checkout(jump) kr k is command ko run kr dena hai

WARNING! jaha command main dash capital M ( -M ) likha hai os ko wese hi likhna hai nahi toh branch already exist ka error a jaye ga

## Syntax;-

git config --global alias.rename 'branch -m'

git branch -M new\_name

# Git checkout <branch\_name> (branch ko switch krne liye);

Is command k istmal se jonsi si b command par switch krna ho os ko istmal krte hain

## Syntax;-

git checkout branch\_name

# Git branch (branches ko dekhne k liye);

Is command k istmal se current branch aur jo baqi branch hai woh show hoti hain

## Syntax;-

git branch

# Git branch -d <branch\_name> (branches ko delete krne k liye);

Is command k istmal se current branch k ilawa dusri branches ko delete kr sakte hai

## Syntax;-

git branch -d branch\_name

# Git fetch (branch se file copy krna);

Is command k istmal se hm file ko copy krne ka batate hain

## Syntax;-

git fetch

git checkout -m branchName fileName

git add fileName

git commit

# Git checkout – <fileName> (file ko revert krta hai);

Is command k istmal se hm file ko revert kr sakte hain

## Syntax;-

git checkout – fileName

# Git checkout – <fileName> (file ko revert krta hai yani localy bagair commit wali files ko pehel last commit jaisa bana deta hai);

Is command k istmal se hm file ko revert kr sakte hain

## Syntax;-

Ye sirf specific file jo revert krta hai jis ka hm ne naam diya hota hai

Syntax :- git checkout – fileName

Ye sari file ko revert krta hai

Syntax :- git checkout .

Git push

## Git push --set-upstream <remote> <branch> (live par branch aur data upload krne k liye)

Is k istmal se hm apna local branch ko aur commit kiya howa code live par bhegte hain

## Syntax;-

Git push

## Git push(live par data upload krne k liye)

Is k istmal se hm apna commit kiya howa code live par bheg sakte hai

## Syntax;-

git push --set-upstream origin branch\_name

Flutter Errors

# Handshake error

Jab breakpoint debuging krte hain toh aksar image ka handshake error a jata hai

Flutter

# Flutter kya hai?

Flutter is Google’s UI toolkit for building beautiful, natively compiled applications for mobile, web, and desktop from a single codebase.

Flutter google ka mobile ,web, desktop ui building toolkit hai jaha sirf aik hi tarha ka code likh kr hm mobile web aur desktop teeno par chala sakte hain

# Const;

Ye kisi b fixed variable jise hm ne change nahi krna os k sath laga dain toh reload k time bar bar ye reload nahi ho aur is se hamari performance best hoti hai

# final;

is ko istmal krne se hm is ke variable ya function main kuch add toh kr sakte hain par change nahi kr sakte

Hot reload | Hot restart

# Hot Reload

Hot reload button istmal krne se sirf build method hi restart hota hai

Dart DataType & Scaffold

# Dart DataTypes;

// ye sirf numric value k liye hota hai

int hours = 9;

// ye sirf decimal value k liye hota hai

double minuts = 38;

// ye character k set k liye hota hai

String projectName = "flutter in ";

// ye bolion k liye hota hai yani tur aur flase

bool isMale = true;

// ye integer aur decimal dono k liye istmal ho sakta hai

num temp = 30.5;

var datAndDate = "17,may";

// constant aik aisa variable container hai jiski value kabi b change nahi hoti

const pi = 3.14;

// ye b const ki tarha hi hota hai par is main ager aik list banai ho toh os main addtion kiya ja sakta hai par const main nahi kr sakte

final list = ['a', 'b', 'c'];

# String interpolation;

Ye variable ko $ sign se call krne k liye istmal hota hai

## E.g,

('$projectName $hours hourse and $minuts minuts')

# Scaffold;

Ye widget material ka aik aisa component hai jaha boht se widgets hain..

## E.g,

class HomePage extends StatelessWidget {

  @override

  Widget build(BuildContext context) {

    // scaffold aik aisa material hai jaha boht se widgets hain

    return Scaffold(

      // ye app ka head hota hai is liye is ko app bar kehte hain

      appBar: AppBar(

        // ye app ka title hai

        title: Text("App Catalog"),

      ),

      body: Center(

        child: Container(

          child: Text('$projectName $hours hourse and $minuts minuts'),

        ),

      ),

      // ye app bar main aik menu button yani drawer dikhata hai

      drawer: Drawer(),

    );

  }

}

Function Classes Routes Theme & Text

# BuildContext Context;

Konsi cheez ki kaha par location ye humain widget method main buildcontext cotext(ye aik peace of information hai) batata hain

# Function;

Widget function main hm Widgets ko call krte hai aur istmal krte hai

## E.g,

  Widget build(BuildContext context) {

    return Material(

      child: Center(

        child: Text(

          "Login Page",

          // ye text ko style deta hai

          style: TextStyle(

            fontSize: 20.0,

            fontWeight: FontWeight.bold,

            color: Colors.blue,

          ),

          // ye font size ko double kr deta hai

          textScaleFactor: 2.0,

        ),

      ),

    );

  }

Function main hum parameter ko ager Curly bracket k andar likhen toh os ko optional kaha jata hai ager os k bagair likhein toh os ko compulsory kaha jata hai aur ager @required k sath likhein toh os ko b compulsory kaha jata hai

  String bringVegetable(int rupees,{@required String list, bool thaila = false}) {

    // Type code

  }

# Classes;

Class k naam ka pehla word hamesha capital word se hi shuru hota hai Classes ka andar jo likha jata hai os ko method kaha jata hai aur jo os se bahar likha jata hai os ko function kehte hain

Example: class aik blueprint hai aur oject os k clone jaise hain

# Routes;

Is se hm page k path define krte hian

## E.g,

        // ye function k sath page k path set krta hai

        routes: {

          // by defaout jo hota hai woh slash path par chalta hai

          "/": (context) => LoginPage(),

          "/home": (context) => HomePage(),

        }

# Initail Routes;

Is se hm default path define krte hain

## E.g,

 is se apni marzi ka default path de sakte hain

   initialRoute: "/home",

# Initial Routes;

Theme set krte hain

## E.g,

// ye humain theme mode batata hai

        themeMode: ThemeMode.light,

        // ! themeMode: ThemeMode.dark,

        // ye os ki property ko define krta hai

        darkTheme: ThemeData(

          // ye color overwrite krta hai aur brightness change krta hai

          // ! brightness: Brightness.dark,

          // ye theme color change krta hai

          primarySwatch: Colors.blue,

        ),

# Text;

Ye text type krne k liye istmal hota hai

## E.g,

Text(

          "Login Page",

          // ye text ko style deta hai

          style: TextStyle(

            fontSize: 20.0,

            fontWeight: FontWeight.bold,

            color: Colors.blue,

          ),

          // ye font size ko double kr deta hai

          textScaleFactor: 2.0,

        ),

SingleChildScrollView

# SingleChildScrollView (ye widget ko screen se bahir nahi jane deta);

Ye widget screen se widget ko bahir nahi jane deta aur os ko scroll main kr deta hain

## E.g,

  // singleChildScrillView bari screen ko scroll deta hai

      child: SingleChildScrollView(

        // column banane k liye

        child: Column(

          // children ko hm colum aur row widget main use krte hain

          children: [

            // login image add hoti hai

            Image.asset(

              "assets/images/login\_image.png",

              fit: BoxFit.cover,

              height: 300.0,

            ),

            // space height 20

            SizedBox(

              height: 20.0,

            ),

            // Form login title text

            Text(

              "Login",

              style: TextStyle(

                fontSize: 24,

                fontWeight: FontWeight.bold,

              ),

            ),

            // space height 20

            SizedBox(

              height: 20.0,

            ),

            // login form  text feilds with padding

            Padding(

              padding: const EdgeInsets.symmetric(

                vertical: 16.0,

                horizontal: 32.0,

              ),

              child: Column(

                children: [

                  TextFormField(

                    decoration: InputDecoration(

                      hintText: 'Enter UserName',

                      labelText: 'UserName',

                    ),

                  ),

                  TextFormField(

                    // ye password ko hide krta hai

                    obscureText: true,

                    decoration: InputDecoration(

                      hintText: 'Enter Password',

                      labelText: 'Password',

                    ),

                  ),

                ],

              ),

            ),

            // element space

            SizedBox(

              height: 20.0,

            ),

            // elevated login button

            ElevatedButton(

              onPressed: () {

                Navigator.pushNamed(context, MyRoutes.homeRoute);

                print('login button work');

              },

              child: Text("Login"),

              // button style

              style: TextButton.styleFrom(

                // button width and height

                minimumSize: Size(130, 45),

              ),

            )

          ],

        ),

      ),

    );

# Navigator Widgets;

Is ko istmal kr k hm kisi b button par ya link par hyper-link laga sakte hain

## E.g,

ElevatedButton(

              onPressed: () {

                // navigator widget hamere link hyper link ka kaam krta hai

                Navigator.pushNamed(context, MyRoutes.homeRoute);

                print('login button work');

              },

              child: Text("Login"),

              // button style

              style: TextButton.styleFrom(

                // button width and height

                minimumSize: Size(130, 45),

              ),

            )

Stateful | Animated Container | Futre Delay

# State;

Aisi cheez jis main tabdili a jaye ose state kehte hian

## E.g,

jese k main chal raha hu

# StateLess;

Is main woh widget hote hian jo change nahi hote

# StateFull Widgets;

Is main woh widget hote hai jo changeable hote hain

# Underscore( \_ ) variable and function;

Underscore kisi b variable aur function ko dart language k andar private krne k liye istmal hota hai.Private variable ya funciton ko current file ya current class k ilawa koi b access nahi kr sakta.

# Conditional Statement;

Ye if else ki tarha ki ternary condition hai

## E.g,

Bool changeButton = false;

BorderRadius.circular(changeButton ? 50 : 8)

# AnimatedContainer;

Ye widget container ko animate krta hai aur time duration ki property provide krta hai is waja se ye Container Widgets se different hai

## E.g,

              child: AnimatedContainer(

                // container structure batane k liye

                duration: Duration(seconds: 1),

                width: changeButton ? 50 : 150,

                height: 50,

                alignment: Alignment.center,

                // container text and icon with conditional statement

                child: changeButton

                    // login button clicked icon

                    ? Icon(

                        Icons.done,

                        color: Colors.white,

                      )

                      // login button text

                    : Text(

                        "Login",

                        // text ko style dene k liye

                        style: TextStyle(

                          fontWeight: FontWeight.bold,

                          fontSize: 18,

                          color: Colors.white,

                        ),

                      ),

                // container ko decorate krne k liye

                decoration: BoxDecoration(

                  color: Colors.blue,

                  // button shape

                  // \* shape: changeButton ? BoxShape.circle : BoxShape.rectangle,

                  // border radius on container

                  borderRadius: BorderRadius.circular(changeButton ? 50 : 8),

                ),

              ),

# Future delay;

Ye kisi b event k hone par os ko duration time de kr os k funciton ko call krta hai

## E.g,

onTap: () async {

                // set state widget function ko recall krta hai phir changing nazar ati hai ye sirf state ful main hi istmal hota hai

                setState(() {

                  changeButton = true;

                });

                // await future se hum kisi b event ko apni marzi k mutabi rak sakte hain leking is k liye event main aysnc laga zruri hai

                await Future.delayed(Duration(seconds: 1));

                // Navigator.pushNamed(context, MyRoutes.homeRoute);

                print('login taped');

              },

Form | textFeildValidation | ink

## Form widget;

Ye humain validation lagane k liye madad krta hai is k bagair hm koi b form ka action tringered nahi kr sakte aur os k liye form main aik key property main GlobalKey<FormState> define krna parta hai

textFeildValidtaion;

TextFormField main validatior property laga kr validation ko condtion k sath define krte hain

## E,g.

validator: (value) {

                        if (value.isEmpty) {

                          return "Password cannot be empt";

                        } else if (value.length < 6) {

                          return 'Password length should be atleast 6';

                        }

                        return null;

                      },

## 

# Ink;

Ye b container ki tarha hi kaam krta hai par is main kuch zyada hi decorations hote hain is ko InkWell Widget k sath b istmal kiya ja sakta hai

Material Drawer | DevTools | ListView |NetworkImage

# Material Drawer;

Ye Drawer banane k liye liye istmal hota hai jo k app bar k left side par aik icon bana kr waha clich par drawer open krta hain

Isko difine krne k liye Drawer Widget main DrawerHeader Widget ko istmal kr k lagate hain

## E.g,

// DrawerHeader

            DrawerHeader(

              padding: EdgeInsets.zero,

              child: UserAccountsDrawerHeader(

                margin: EdgeInsets.zero,

                accountName: Text('Arsalan Khalid'),

                accountEmail: Text('s.arsalankhalid@gmail.com'),

                currentAccountPicture: CircleAvatar(

                  backgroundImage: NetworkImage(imageurl),

                ),

              ),

            ),

# NetworkImage Widget;

Is Widget ko istmal kr k hum online image laga sakte hain….

## E.g,

NetworkImage(imageurl),

# ListView;

Ye drawer main list banata hai aur batata hai k os main icon kaha lagana hai aur text kaha lagana hai

## E.g,

ListTile(

              leading: Icon(

                CupertinoIcons.home,

                color: Colors.white,

              ),

              title: Text(

                'Home',

                // text scale text bara krta hai

                textScaleFactor: 1.2,

                style: TextStyle(color: Colors.white),

              ),

            ),

# DevTools;

Ye humain web ki tarha hi Widget inpect krta hai jis se hmain ye pata chal jata hai k konsa widget kaha hai aur kis structure main kitni jaga lay raha hai

Is k liye jo extension istmal ki jati hai vs code main wo darj zail hai

## WidgetLayout extension;-

Ye entension hm istmal kr k code ko inspect krte hain

BuildContext, 3 Trees & Constraints Explained

# Build Context

Build context Widget tree se widget ki location batata hai yani location jo hai wohi element hai element kuch nahi hai ye bas context hai

# Constraints;

Widget apna constraints rakhta hai jo ose os k parent se milta hai. Ye char properties set hai jis main child widget ko max and min heigth\_width batani hoti hai os k badh child widget apni marzi k mutabiq max aur min height\_width main reh kar height aur width deta hai

## E.g,

Container(

        color: Colors.green,

        constraints: BoxConstraints(

          maxHeight: 400,

          maxWidth: 300,

          minHeight: 50,

          minWidth: 50,

        ),

        child: Container(

          color: Colors.red,

          height: 100.0,

          width: 80.0,

        ),

      ),

# UnConstraints;

Ye widget constraint ko khatam krta hai of child ko azadi deta hai k who apni marzi k mutabiq size de sake

## E.g,

Syntax;

UnconstrainedBox(

child: Container(color: red, width: 4000, height: 50),

)

### Do you know?

Ager 100 X 100 pixel width and height wale container ko 5 padding di jaye toh os k pass 90 X 90 pixel ki width and height reh jaye gi.

# Widgets size kaha se leta hai;

Widget size uper se yani apne parent widget se leta hai

## E.g,

body: Container(

        color: Colors.green,

        height: 200.0,

        width: 200.0,

        child: Container(

          color: Colors.red,

          height: 100.0,

          width: 100.0,

        ),

      ),

Jo pehla container hai jis ki height and width 200 hai toh woh user screen par render(draw) hogi na k child container jis ki width and height 100 hai

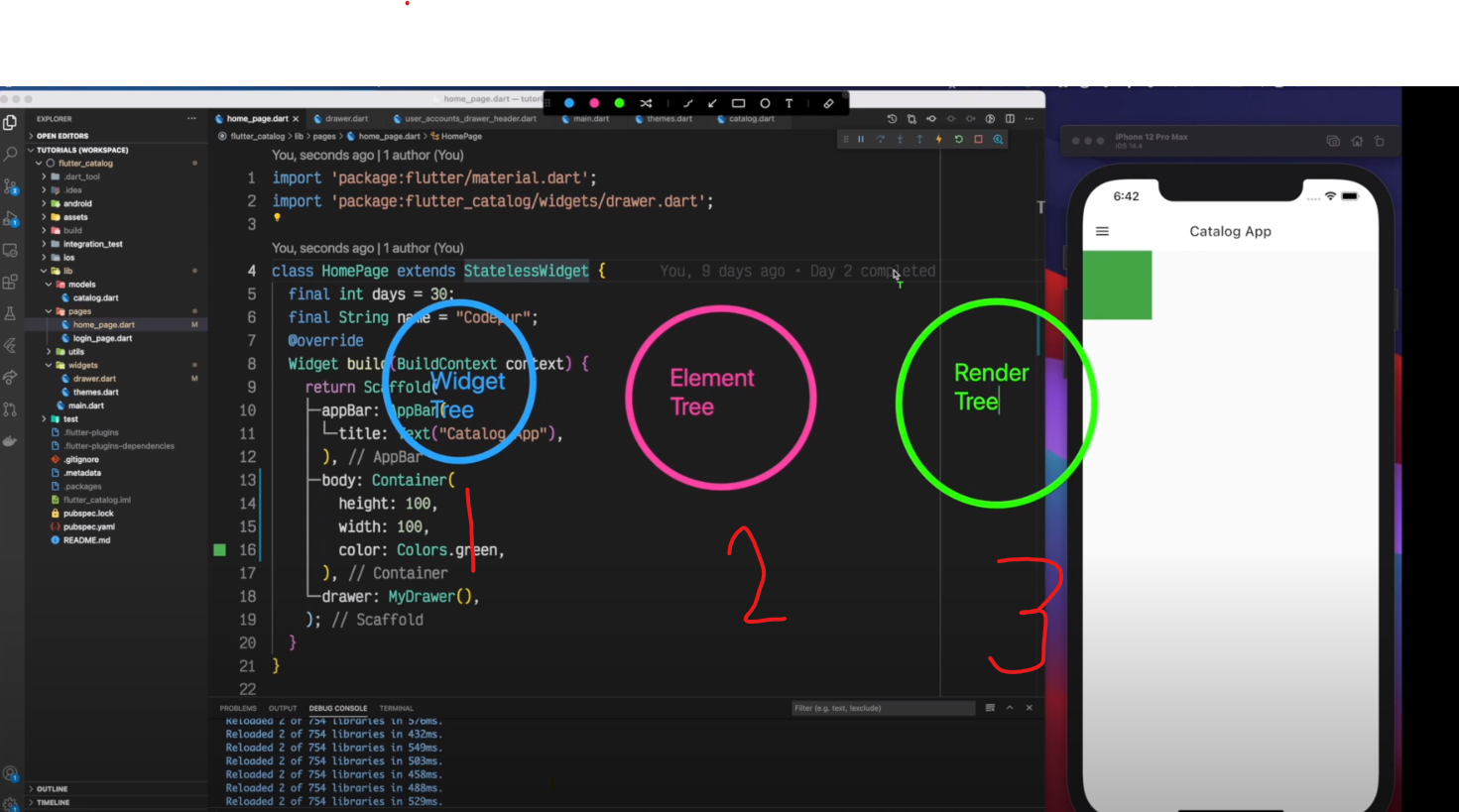
# Widget Position kaha se leta;

Widget postion apne parent se padding ya margin k zariye leta hai

# 3 trees;

Flutter main 3 tree hote hain

1. Widget tree
2. Element tree
3. Render tree



## Widget tree;

Widget tree yaha par ham apna code likhte hain aur flutter ko batate hain k kya krna hai Example

Yani flutter widget aik draw sketch gameing engine ki tarha hai jaha hm bas bate hain k kya draw krna hai os k badh woh khud element k pass jata hai aur waha ose sketch deta hai who sketch element tree hasil krne k badh os ko bataye howe trike k mutabiq Render tree main bhej kr design kr deta hai jo badh main screen par nazar ata hai

## Element tree;

Widget immutable (aik martba update ho k dubar update na hone wale yani k change na hone waley). Is liye Element tree jo hota hai woh build method ko dubara call krta hai aur changes batata hai aur kehta hai k redraw karo yani purana widget jo update kiya tha woh dubara create hota hai lekin Element khud ko destroy nahi kr kyun k ose pata hota hai k is type same hai par who apne ap ko update kr leta hai

## Render tree;

Widget tree se info le kr Element tree information ko element main convert kr k agay Render tree ko deta hai jo agay os application ko design de kr app screen par show krta hai

## Do you know? Native component;

Flutter k ilawa dusre jitne b frameworks hain sab native widget use krte hain

Native component hamesha apne native k mutabiq wale device par hi show hota hai yani android wala android par aur ios wala ios par

### This title is end

ListView Builder | List Generate |Card & Asserts

# ListTile Widget;

Ye widget zyadatar drawer main istmal hota hai ye widget ListView ko abad krta hai is main hm leading trailing icon wagiara de kr render krte hain

# ListView Widget;

Is widget k istmal se hm item ko aik linear(aik tarteeb wise) list scrollable krte hain.aur is se hm aik item ko multiple time repeat kr k show b kr sakte hain

Lest generate widget;

Is widget ko istmal se hm multi time aik list item ko dikha sakte hain

## E.g,

List.generate(50, (index) => CatalogModel.item[0]);

Card Widget;

Is widget k istmal se hm list ko aik card main rakh sakte hain jo k aik shadow box ki tarha hota hai jis se item khubsurat lagti hai

# Asserts

assert ye check krta hai k jo humain value mil rahi hai wo null toh nahi ager null ho toh humain error show kr deta hai ye sirf debuging k time hi istmal krna chahiye

## E.g,

assert(item != null)

Local Files | Load & Decode JSON

# Local Files;

Loca files hamesha assets ka folder pakage main create kr k rahi jati hain aur jis tarha se hm image ko pubspec.yaml ki file se permision de kr allow krte hain osi tarha local file ko hi permision di jati hai

## E.g

    var catalogJson = await rootBundle.loadString("assets/files/catalog.json");

# Init state

Ye humare function ko stateful widget main sab se pehle run krta hai ager koi function build function se pehle call krna ho toh os ko is main call krte hain

## E.g,

void initState() {

    super.initState();

    loadData();

  }

  // external files like json ya koi aur file se data get krne k liye function likha hai

  loadData() async {

    var catalogJson = await rootBundle.loadString("assets/files/catalog.json");

    final decodedData = jsonDecode(catalogJson);

    var productsData = decodedData['products'];

    print(productsData);

  }

Encoder Decoder;

JSON ko encode decode krne k liye dart:conver library(import ‘dart:convert’;) ka istmal hota hai

## E.g,

  // external files like json ya koi aur file se data get krne k liye function likha hai

  loadData() async {

    var catalogJson = await rootBundle.loadString("assets/files/catalog.json");

    final decodedData = jsonDecode(catalogJson);

    var productsData = decodedData['products'];

    print(productsData);

  }

JSON Mapping | Data Class Generator | Progress Indicator

# Factory constructor

Ye humain constructor choose krne k liye help krta hai

Example

Ap k pass aik animal class hai aur dho constructor hai pehla dog naam ka constructor hai aur dusra cat naam ka toh ap os ko factory bana sakte hain

Google par is k bare main zyada read karo

## For mor knowledge: Codepur par network coockbook read karo

# Data Class Generator

Ye aik vs code extenion hai jo dart data classed easily and jaldi se likh deti hai code generate kr deti hai jis file mai ye krna ho waha ja kr command palette open krna hai aur waha class select kr k enter kr dena hai

# Progress Indicator Widget

Ye widget screen par sarfing icon dikhane k liye istmal kiya jata hai

## E.g,

child: CircularProgressIndicator(),

GridView | GridTile

# GriView;

Jese hm pehle listTile ko aik list ki tarha likhte they ab os ko aik box ki tarha likhain gay who sab GridView main hota hai

Velocity\_x UI\_Design\_Packet

# Velocity\_x packet;

Ye aik packet hai jo ui ko design krne k liye code thora chota kr deta hai

Hero Animation | Arc | FloatingActionButton | DummyText

# Hero Animation;

Ye aik packet hai jo ui ko design krne k liye code thora chota kr deta hai

# Arc;

Ye Velocity\_x se liya gaya hai is se hum kisi animated container ko ap marzi k mutabik aik teer kumaan ki shakal de sakte hain

# FloatingActionButton;

Ye aik round button butten create kr hai jo click able ho sakta hai os par icon lagya ja sakta hai

# DummyText;

Dummy text generator extension k zariye hm koi b dummy paragraph apni marzi se paste kr sakte hain

Themes | DarkTheme | SystemThemes

# Themes;

MaterialApp main theme ko hm themeMode ki property de kr os main theme ko batana dark hai ya light ya dono

Teen tarha mode theme main istmal hote hain jin ka syntax darj zail hai.

Sab se pehle yaha file ko jo hm ne theme k style ki code ki hai os ko import krna hai main.dart ki file

E.g,

## SystemTheme;

themeMode: ThemeMode.system,

theme: FileClassName.lightTheme(context),

darkTheme: FileClassName.darkTheme(context),

## LightTheme;

themeMode: FileClassName.light,

theme: FileClassName.lightTheme(context),

darkTheme: FileClassName.darkTheme(context),

## DarkTheme;

themeMode: FileClassName.dark,

theme: FileClassName.lightTheme(context),

darkTheme: FileClassName.darkTheme(context),

CatalogModel\_Fix | CartPage | Placeholder

# CatalogMolel\_fix;

Is k page main main static function banaye hain jis ki madad se hm id ya position(index) de kr json data get kr sakte hain

## E.g

class CatalogModel {

  static List<Item> item;

  // get item by ID

  static Item getById(int id) =>

      item.firstWhere((element) => element.id == id, orElse: null);

  // Get item by position

  static Item getByPostion(int pos) => item[pos];

}

# Placeholder

Placeholder k istmal se hm aik dummy box lay sakte hai his main croxx bana hota hai os se hm ye check kr lete hai k kina area cover krta hai

CartPage;

Is page main list view ki hai aur devider laga kr neich button aur price lagai hai

ScaffoldMessanger | CartModel | ListFold

# ScaffoldMessanger;

Is se hm button k click par aik msg bottom main pop krwate hain

# CartModel;

Ye aik file create ki hai aur main main caltalog fields , collection of IDs – store ids of each item, get catalog, set catalag, get items int the cart from catalog model, price ko jama krne ka trika cart ko add krne funciton os ko add krne remove krne sab is main likha hai

# ListFold;

Fild method ko istmal kr hm cart ki prices ko mathematicaly add kr sakte hain

Add to Cart Functionality

# Singaltaon object(singalton object banane ka trika)

class ko singalon banane ka trika is se hm bar bar class ko create kr rahe hain toh is se problem ye hoti hai k har bar naya object create hota hai toh os k liye ye istmal kiya hai

## E.g & Syntax

  static final variableName = ClassName\_internal();

  ClassName.\_internal();

  factory ClassName () => variableName;

baqi is k code main jo changes ki hai who is ki commit main ja kr read kr k practice abi krni hai

VelocityX State Management | VX Watch |VxBuilder | VxConsumer

# Vx Watch;

// ye widget ko dubara redraw krne k liye veleocy x k pakage ka method call krta hai jo hm os k mutaion main funciton dete hain os k call hone par ye dubara widget ko rebuilt krta hai

## E,g.

  Widget build(BuildContext context) {

    // ye widget ko dubara redraw krne k liye veleocy x k pakage ka method call kiya hai jo k add hone par dubara widget ko draw krta hai

    VxState.watch(context, on: [AddMutation, RemoveMutation]);

    final CartModel \_cart = (VxState.store as MyStore).cart;

    bool isInCart = \_cart.item.contains(catalog) ?? false;

    return ElevatedButton(

      onPressed: () {

        if (!isInCart) {

          AddMutation(catalog);

        }

      },

      style: ButtonStyle(

        backgroundColor: MaterialStateProperty.all(context.theme.buttonColor),

        shape: MaterialStateProperty.all(StadiumBorder()),

      ),

      child: isInCart ? Icon(Icons.done) : Icon(CupertinoIcons.cart),

    );

  }

# VxConsumer;

ye widget ko dubara redraw na kr k sirf jo hm bar bar action krte hain os ko rebuild krta hai is main hm notification b de sakte hain

## E,g.

VxConsume(

            mutations: {RemoveMutation},

            notification: <notification>,

            builder: (context, \_) {

              print("rebuild working");

              return "\$${\_cart.totalPrice}"

                  .text

                  .xl4

                  .color(context.theme.accentColor)

                  .make();

            },

          ),

# VxConsumer;

ye widget ko dubara redraw na kr k sirf jo hm bar bar action krte hain os ko rebuild krta hai is main hm notification nahi de sakte Is main aur VxConsumer main nitifcation ka farag hai

## E,g.

VxBuilder(

            mutations: {RemoveMutation},

            notification: <notification>,

            builder: (context, \_) {

              print("rebuild working");

              return "\$${\_cart.totalPrice}"

                  .text

                  .xl4

                  .color(context.theme.accentColor)

                  .make();

            },

          ),

Badge | HTTP | API | Networking

# Badge;

# Ye kisi bi icon par aik chota sa badge laga deta hai aur os main ap apna number text ya apni requirement k mutabiq de sakte hain

## E.g

badge(

          color: Vx.red500,

          size: 22,

          count: \_cart.item.length,

          textStyle: TextStyle(

            // color: Colors.black,

            fontWeight: FontWeight.bold,

          ),

        ),

# Http;

Ye aik pakage hai hai jo hmare madad krta hai http k zariye yani url k zariye koi data lane k liye

## E.g

import 'package:http/http.dart' as http;

final url = "https://api.jsonbin.io/b/604dbddb683e7e079c4eefd3";

 final response = await http.get(Uri.parse(url));

# API(Important);

Application Porgraming Interface k bare main abi read krna hai

# Networking;

Koi data hm internet se get krte hai ya upload krte hain woh networking k zariye se hota hai

# Flutter Release on live;

## Application Permisions in debug mode

Internet permision ya koi aur pemissison check krne k liye flutter pakage main android k folder main ja kr Debug main permisson check kr leni hai os k badh ager koi permision add krni ho toh who b kr sakte hain

## Application Permsion for live platform

jab app ko live platform par upload kr k check krna hai toh os k liye sab se pehle android k folder main ja kr sub\_folder main main ja kr AndroidManifest.dart ki main ja kr permission deni hai

## After application code comple;

Jab codeing complete kr k application ka sara code ap ne likh diya ho os k bad terminal main ja kr hamesha 2 command zrur run krni hai jo darj zial hain

Command no.1

Flutter upgrade

(is comand k istmal se flutter upgrade ho jata hai aur jo changes hoti hai who sari pakage main ho jati hain)

Command no.2

Flutter create .

(flutter upgrade krne k badh jo change hoti hain is ko run krne se on k filders a files sari visible ho samne a jati hain)

# Pakages;

Ye pehle se bulid code ko aik function k andar likh kr rakhe dete hain toh is ko istmal kr k hm apni marzi k mutabiz funciton call kr sakte hain