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MAD PWA LAB

LAB 4

Aim: To create interactive form using widgets

THEORY :

Interactive forms go beyond the static text boxes and radio buttons. They leverage widgets to create engaging and user-friendly experiences that improve data collection and user satisfaction.

Here's a theoretical dive into the world of interactive forms with widgets:

What are Widgets?

Widgets are pre-built user interface elements that add specific functionalities to your forms. They act as building blocks, offering a variety of interactive features like:

- **Dropdowns:** Allow users to select from a list of options.
- **Sliders:** Enable users to choose a value within a specific range.
- **Date pickers:** Facilitate easy date selection.
- **Image uploaders:** Permit users to submit pictures.
- **Progress bars:** Show the form completion progress.
- **Conditional logic:** Display or hide fields based on previous answers.
- **Interactive maps:** Allow users to pinpoint locations.

Benefits of using Widgets:

- **Enhanced User Experience:** Widgets make forms more engaging and intuitive,leading to higher completion rates.
- **Improved Data Quality:** Interactive controls like sliders and date pickers reduce errors and capture precise data.
- **Streamlined Workflows:** Conditional logic helps personalize the form experience and guide users efficiently.
- **Increased Accessibility:** Features like image uploaders and location pickers cater to diverse user needs.

Key Principles for designing Interactive Forms:

- **Identify your goals:** What data do you want to collect? How will you use it?
- **Target your audience:** Consider their comfort level with technology and specific needs.
- **Keep it simple:** Use clear instructions and avoid overwhelming users with complex widgets.
- **Mobile-friendliness:** Ensure your form adapts seamlessly to different devices.
- **Accessibility:** Make your form usable for everyone, regardless of abilities.

Popular Platforms for building Interactive Forms:

- **Typeform:** Drag-and-drop builder with various widgets and customizable themes.
- **Google Forms:** Easy-to-use platform with basic widgets and integration with other Google services.
- **JotForm:** Wide range of widgets, conditional logic, and advanced customization options.
- **Zoho Forms:** Extensive features, including payment integrations and data analysis tools.

Beyond the Theory:

Remember, theory is just the foundation. To fully grasp interactive forms, consider:

- **Exploring real-world examples:** Look at forms from different industries to see how they use widgets effectively.
- **Trying out different platforms:** Test drive various form builders to discover what suits your needs.
- **Gathering user feedback:** Pay attention to user experience and make adjustments based on their input.

By understanding the theory and exploring the practical aspects, you can create interactive forms that captivate your audience and collect valuable data effortlessly.

Code :

```
class DestinationPage extends StatelessWidget {
 @override
 Widget build(BuildContext context) {
   TextEditingController pickupController = TextEditingController();
```

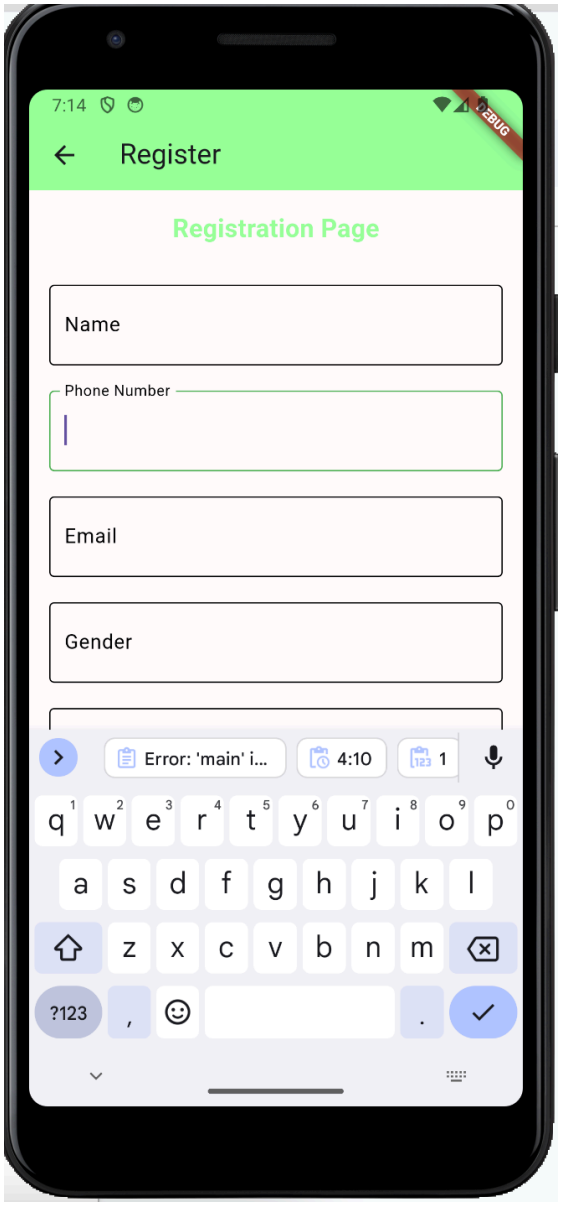
```
TextEditingController destinationController = TextEditingController();

List<String> recommendedPlaces = [
  'CSM International Airport',
  'Panvel Railway Station',
  'Bandra Terminus',
  'Chembur Colony',
  'Vashi Central Park',
  'Seawoods Grand Central',
  'Hakkasan Mumbai',
  'Juhu Beach',
  'Gateway Of India',
  'CSMT Station',
];

final GlobalKey<FormState> _formKey = GlobalKey<FormState>();

return Scaffold(
  appBar: AppBar(
    title: Text('Pickup and Drop Destination'),
    backgroundColor: const Color.fromARGB(
        255, 168, 249, 171), // Set app bar background color
  ),
  body: SingleChildScrollView(
    child: Padding(
      padding: const EdgeInsets.all(16.0),
      child: Form(
        key: _formKey,
        child: Column(
          crossAxisAlignment: CrossAxisAlignment.start,
          children: [
            Text(
              'Enter Locations',
              style: TextStyle(
                fontSize: 24.0,
                fontWeight: FontWeight.bold,
                color: Color.fromARGB(255, 0, 129, 4), // Set text color
              ),
            ),
            SizedBox(height: 20.0),
            TextFormField(
              controller: pickupController,
              decoration: InputDecoration(
                labelText: 'Enter Pickup Spot',
```

```
    border: OutlineInputBorder(),
    filled: true,
    fillColor: Colors.white, // Set text field background color
   ),
   validator: (value) {
    if (value == null || value.isEmpty) {
     return 'Please enter pickup spot';
    }
    return null;
   },
  ),
  SizedBox(height: 16.0),
  TextFormField(
   controller: destinationController,
   decoration: InputDecoration(
    labelText: 'Enter Destination',
    border: OutlineInputBorder(),
    filled: true,
    fillColor: Colors.white, // Set text field background color
   ),
   validator: (value) {
    if (value == null || value.isEmpty) {
     return 'Please enter destination';
    }
    return null;
   },
  ),
  SizedBox(height: 16.0),
  ElevatedButton(
   onPressed: () {
    if (_formKey.currentState?.validate() ?? false) {
     Navigator.push(
      context,
      MaterialPageRoute(
       builder: (context) => DriverListPage(
        pickupSpot: pickupController.text,
        destination: destinationController.text,
       ),
      ),
     );
    } else {
     ScaffoldMessenger.of(context).showSnackBar(
      SnackBar(
       content:
```

```
            Text('Please fill the required information.'),
          backgroundColor:
              Colors.red, // Set snackbar background color
        ),
      );
    }
  },
  style: ElevatedButton.styleFrom(
    primary: Colors.green, // Set button background color
  ),
  child: Text(
    'Search',
    style:
        TextStyle(color: Colors.white), // Set button text color
  ),
),
SizedBox(height: 20.0),
Text(
  'Popular Places:',
  style: TextStyle(
    fontSize: 18.0,
    fontWeight: FontWeight.bold,
    color: Colors.green, // Set text color
  ),
),
SizedBox(height: 10.0),
Container(
  height: 150.0,
  child: ListView.builder(
    scrollDirection: Axis.vertical,
    itemCount: recommendedPlaces.length,
    itemBuilder: (context, index) {
      return Padding(
        padding: const EdgeInsets.all(8.0),
        child: ElevatedButton(
          onPressed: () {
            pickupController.text = recommendedPlaces[index];
          },
          style: ElevatedButton.styleFrom(
            primary:
                Colors.black, // Set button background color
          ),
          child: Text(
            recommendedPlaces[index],
```

```
                    style: TextStyle(
                        color: Colors.white), // Set button text color
                  ),
                ),
              );
            },
          ),
        ),
      ],
    ),
  ),
 ),
 );
 }
}
```

Screenshots :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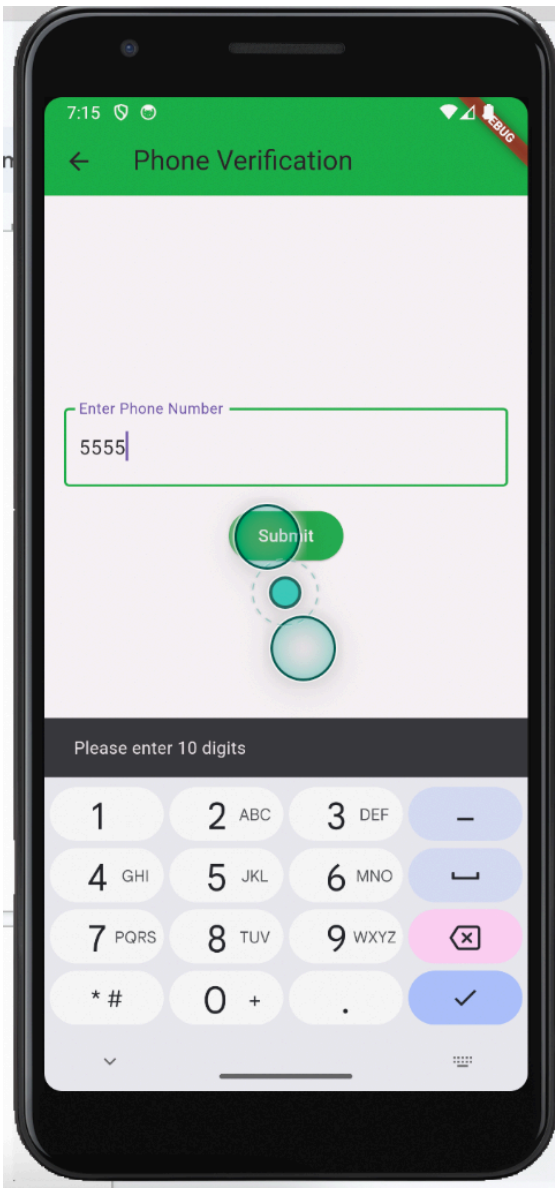
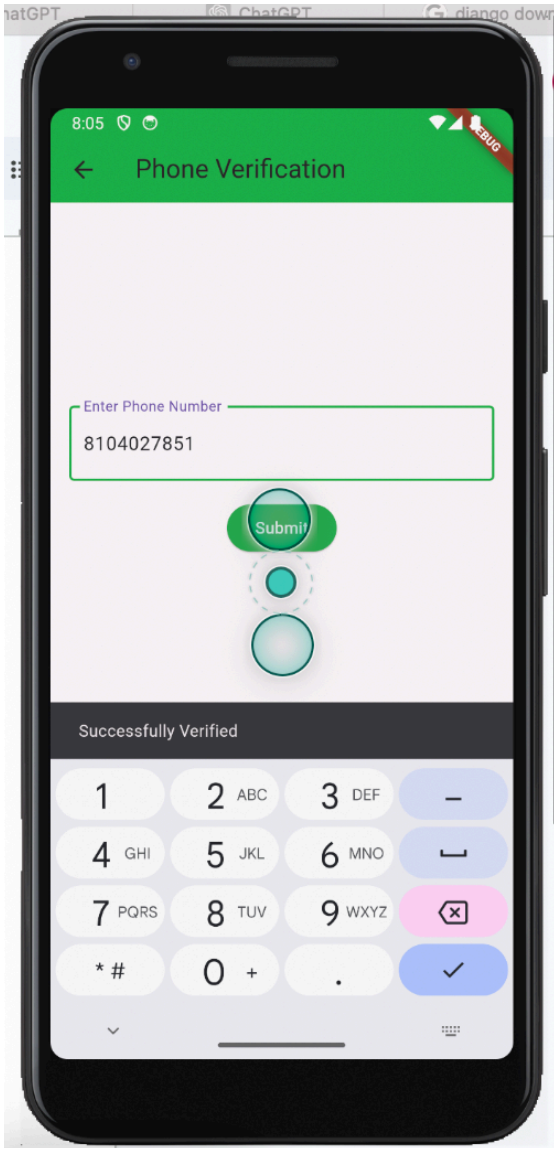
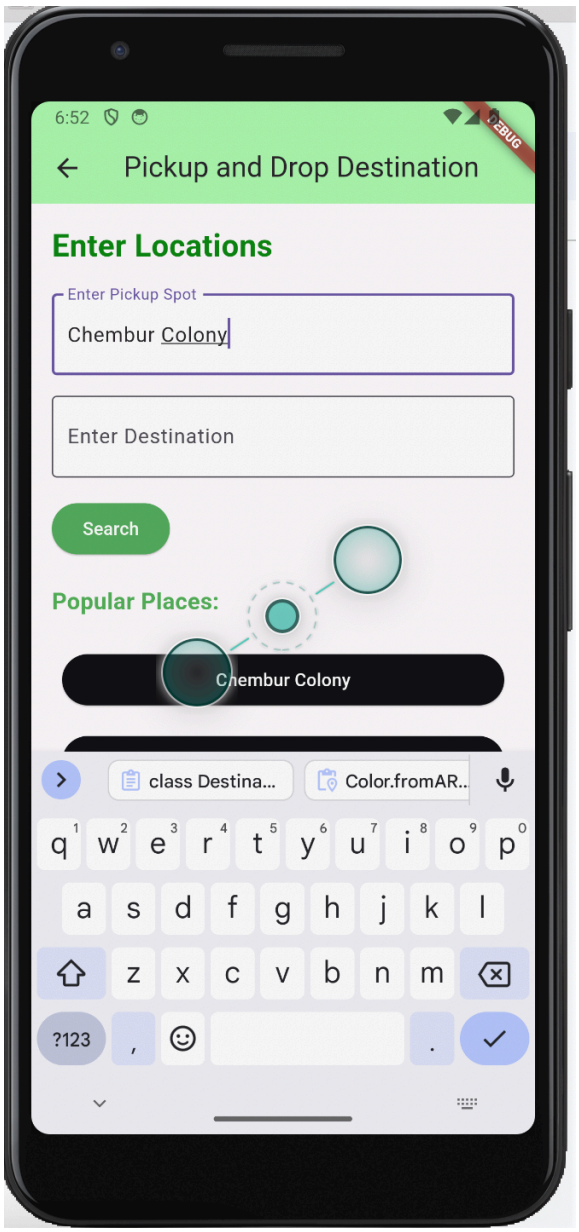
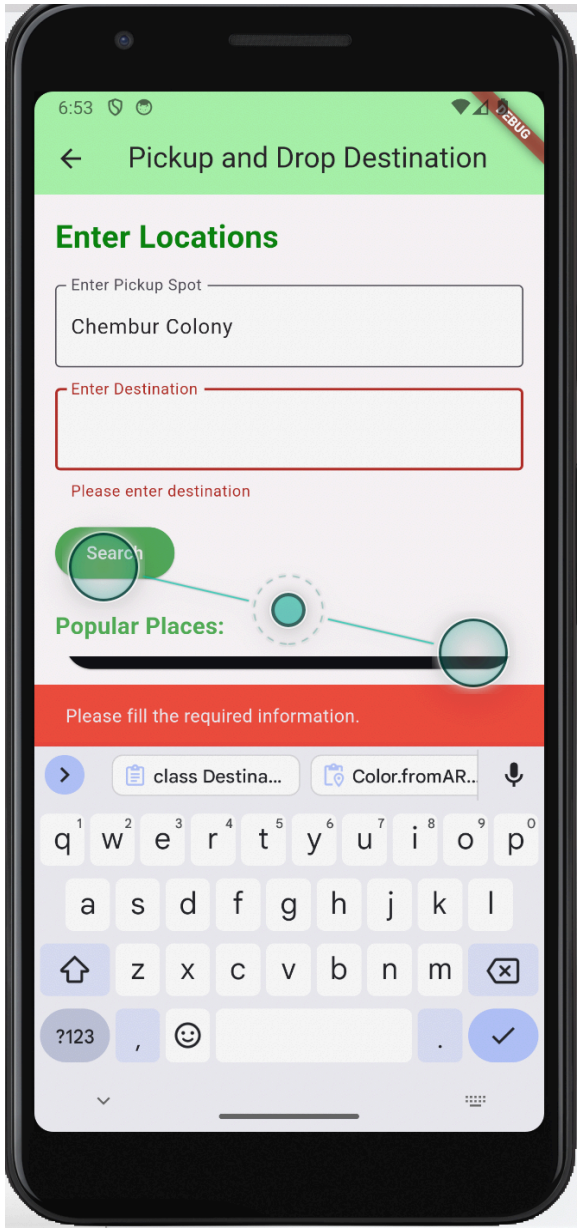
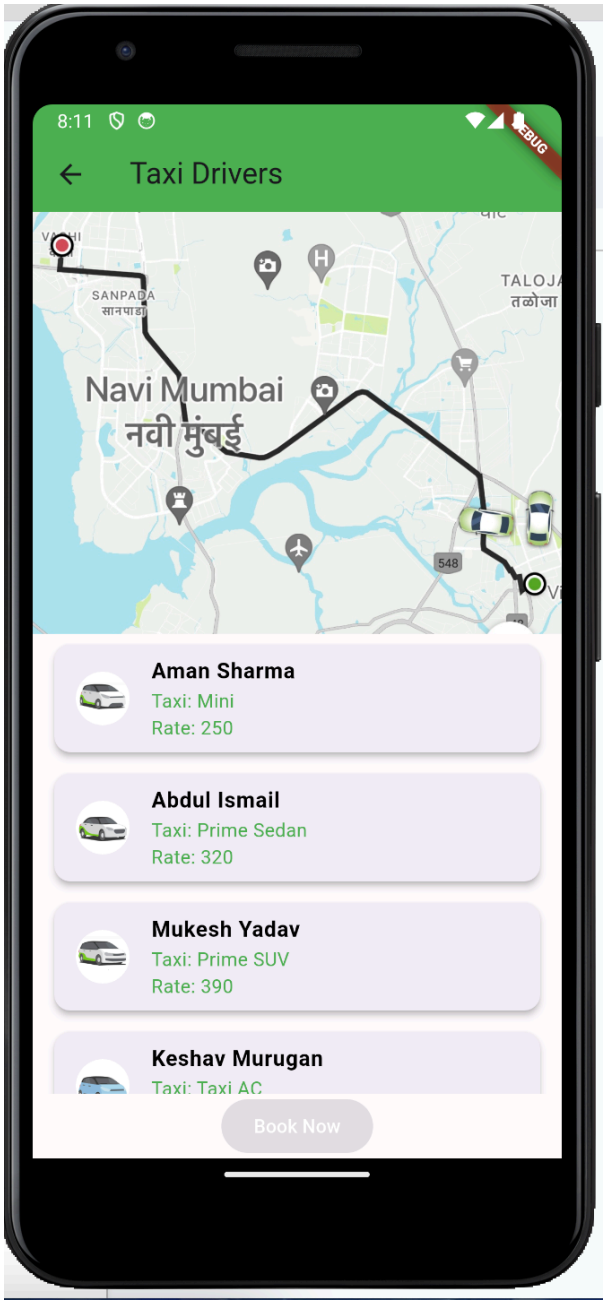
Register
Registration Page
Name
Phone Number
Email
Gender
Error: 'main' i...
4:10
1
?123

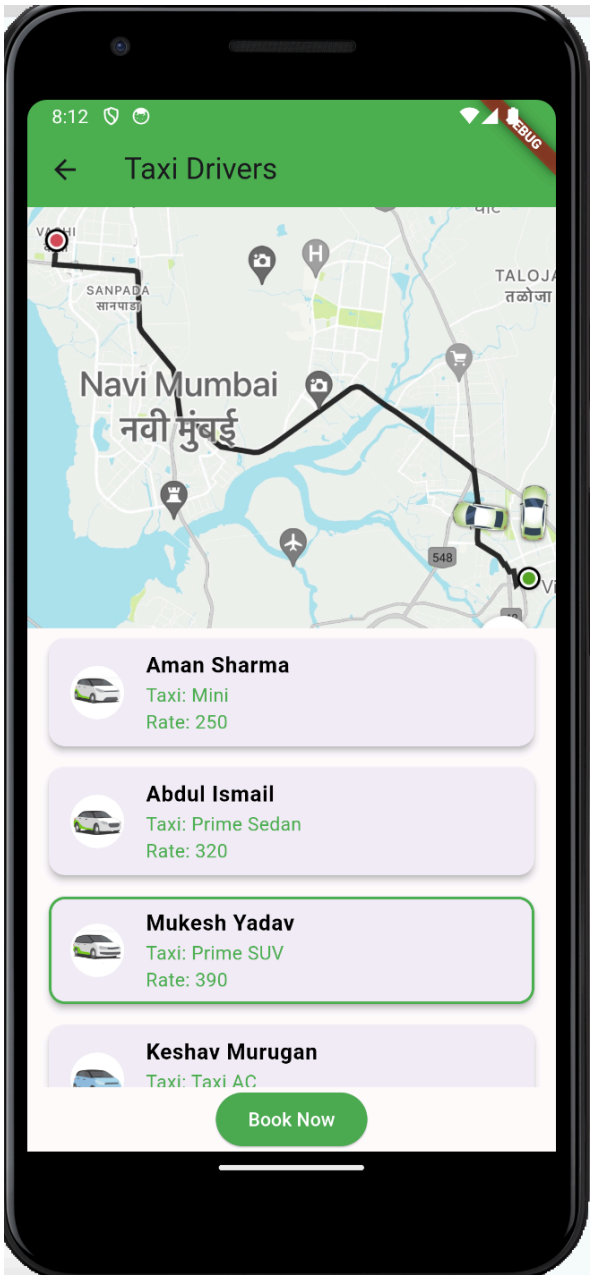

7:15
Phone Verification
Enter Phone Number
5555
Submit
Please enter 10 digits

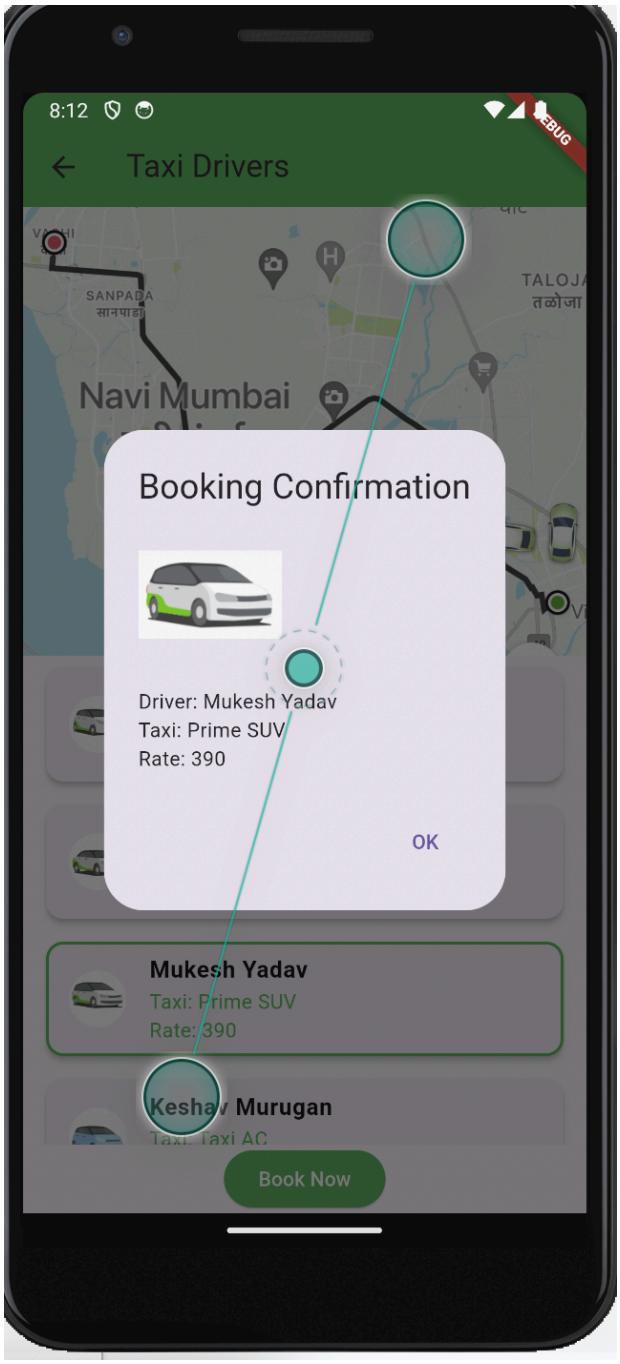

8:05
DEBUG
Phone Verification
Enter Phone Number
8104027851
Submit
Successfully Verified
1
2 ABC
3 DEF
4 GHI
5 JKL
6 MNO
7 PQRS
8 TUV
9 WXYZ
* #
0 +
.


6:52
DEBUG
Pickup and Drop Destination
Enter Locations
Enter Pickup Spot
Chembur Colony
Enter Destination
Search
Popular Places:
Chembur Colony
class Destina...
Color.fromAR..


6:53
DEBUG
Pickup and Drop Destination
Enter Locations
Enter Pickup Spot
Chembur Colony
Enter Destination
Please enter destination
Search
Popular Places:
Please fill the required information.
class Destina...
Color.fromAR..


8:11
Taxi Drivers
Navi Mumbai
नवी मुंबई
SANPADA
सानपाडा
TALOJA
तळोजा
548
Aman Sharma
Taxi: Mini
Rate: 250
Abdul Ismail
Taxi: Prime Sedan
Rate: 320
Mukesh Yadav
Taxi: Prime SUV
Rate: 390
Keshav Murugan
Book Now


8:12
Taxi Drivers
Navi Mumbai
नवी मुंबई
SANPADA
सानपाडा
TALOJA
तळोजा
548
Aman Sharma
Taxi: Mini
Rate: 250
Abdul Ismail
Taxi: Prime Sedan
Rate: 320
Mukesh Yadav
Taxi: Prime SUV
Rate: 390
Keshav Murugan
Book Now



CONCLUSION :

Interactive forms with widgets: Boost data collection and user experience by leveraging pre-built features like sliders, maps, and conditional logic. Remember, user-friendliness, accessibility, and clear goals are key for success.