

**Name:Mahek Taneja**

**Roll no:58**

## **Exp 4 :To create an interactive Form using form widget**

### **Aim:**

To create an interactive and validated input form using the Form widget in Flutter

### **Theory:**

Forms are essential UI components in most mobile applications, used for collecting user input such as login details, feedback, registration, or checkout information.

Flutter provides the **Form widget** along with TextFormField and validation methods to create structured and interactive forms.

### **Key Components:**

#### **1. Form Widget:**

- Acts as a container for form fields.
- Provides easy validation and saving of user input.

#### **2. GlobalKey<FormState>:**

- Used to uniquely identify the form and manage its state (validation, reset, submit).

#### **3. TextFormField:**

- Input field that supports validation and user interaction.

#### **4. Validation:**

- Each field can have a validator function to check the input.

dart

CopyEdit

```
validator: (value) {  
  if (value == null || value.isEmpty) {  
    return 'Please enter some text';  
  }  
  return null;  
}
```

#### **5. Submission:**

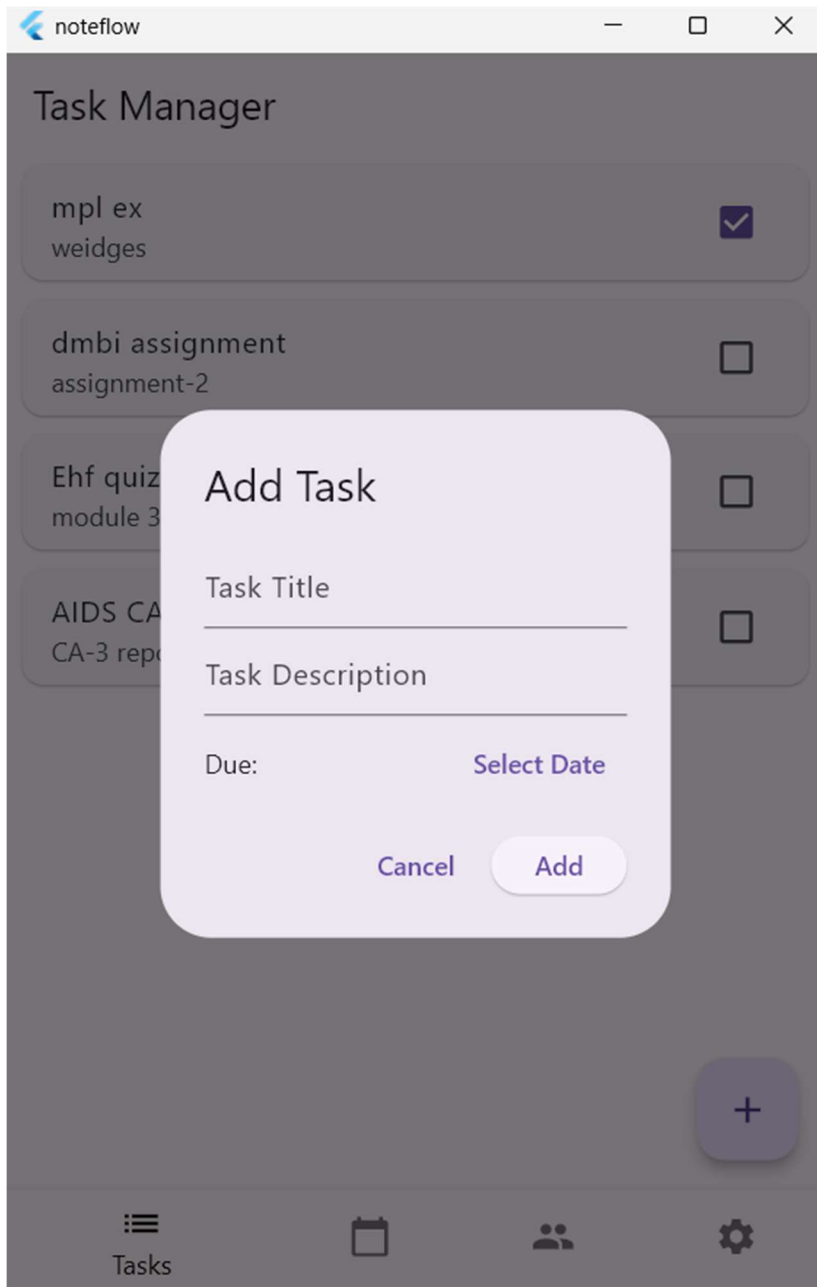
- Forms are typically submitted with a button that calls:

dart

CopyEdit

```
if (_formKey.currentState!.validate()) {  
  // Process the data  
}
```

Creating a well-structured form ensures a smooth and consistent user experience and prevents invalid or incomplete submissions.



## Conclusion:

By creating an interactive form using Flutter's Form widget, we enable structured data input and real-time validation in our application. This enhances the usability and reliability of the app, especially for scenarios like login, signup, or checkout in an E-

commerce app. The use of form state and validators ensures that the data collected is complete and accurate before processing, resulting in a more professional and user-friendly interface.