ITCS444   Mobile Application Development

Tutorial (2)   Marks (10)
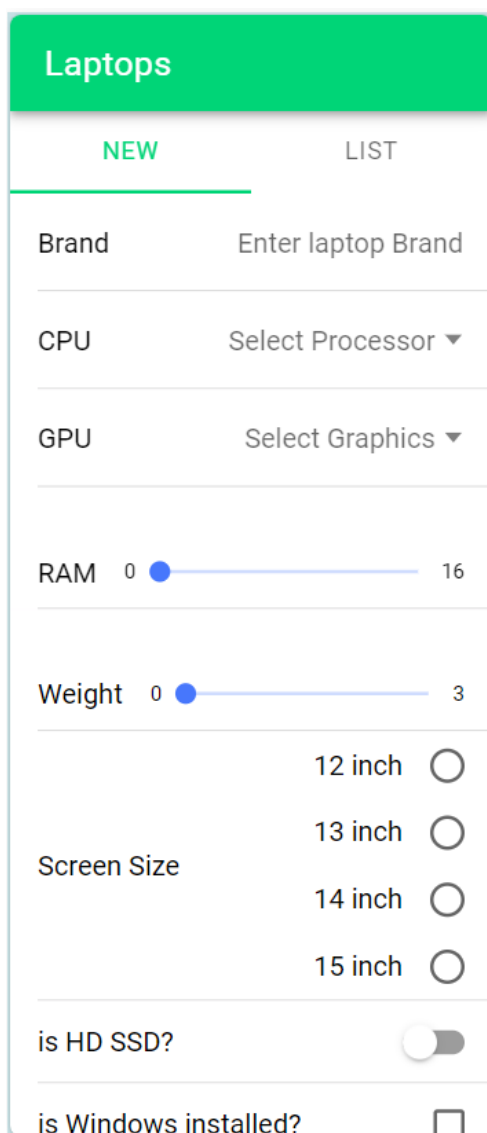
Topics (Slide 02: UI Components)   **Duration:** 1 Hour 30 mins

UI: Input, label, button, items, list, icons, alerts, select, range, radio, checkbox, toggle, datetime, segmented buttons.
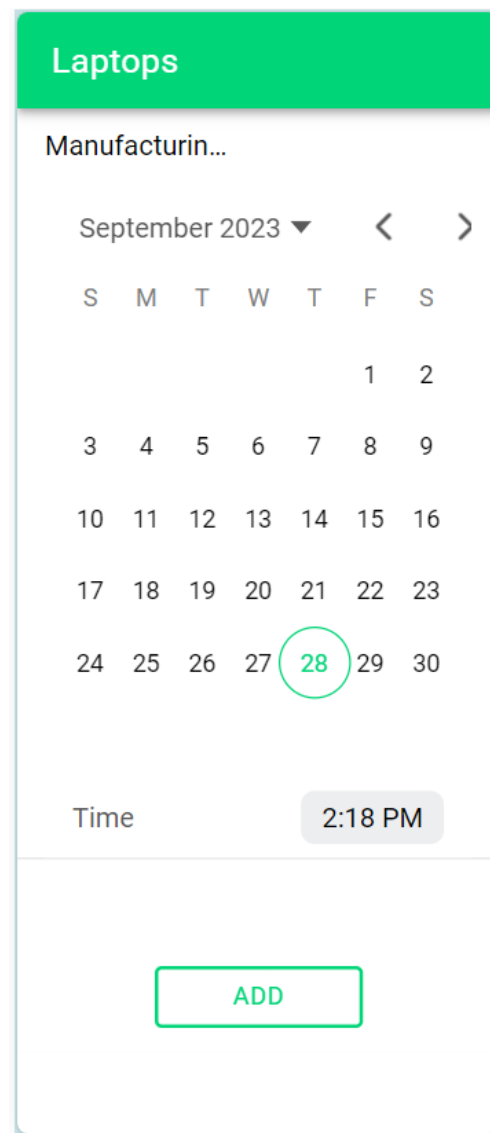
In this tutorial, you will create a form to fill laptop information, and then insert the record in an array. Then display laptop information stored in the array as a list.

Figure 1: Home Page View

Figure 2: Home Page view after Scrolling down

Requirements (Step-by-Step):

1. Define a new data type as follows:

```
laptop {
      Brand:     String,
      CPU:       String,
      GPU:       String,
      RAM:       Number,
      Weight:    Number,
      Screen:    Number,
      Storage:   boolean,
      OS:        boolean,
      ManuDate: Date
}
```

2. Change the toolbar title to '**Laptops'** and its color.

3. Add **input** box to enter laptop **Brand** name.

4. Add **select component** to set the laptop CPU processer. The user is offered four choices and must select a value from [**intel i7, intel i5, intel i3, AMD**]. Display the select options as an **action-sheet**.

5. Add **select component** to set the laptop GPU processer. The user is offered again four choices and must select a value from [**Apple M2 Pro, intel Iris, AMD Radeon, NVidia GeForce**]. Display the select options as an **action-sheet**.

6. Add a **range** component to determine the RAM value. The values should range from 0 to 16 with 1 increment. Enable the pin value (**[pin]='true'**) to show the current range value. Optional, display the current range value.

7. Add a **range** component to determine the Weight value. The values should range from 0 to 3 with 0.5 increment. Enable the pin value (**[pin]='true'**) to show the current range value. Optional, display the current range value.

8. Add a **Radio** component to allow selection of screen size. The user should be able to select from the following values (12 inch, 13 inch, 14 inch, and 15 inch).

9. Add a **toggle** component to set the HDD value to true or false.

10. Add a **checkbox** component to set the OS value to true or false.

11. Add a **Datetime** component to set the manufacturing date.

12. Add a **button** titled '**Add**' to insert a new record of type '**Laptop**' into an array '**List**' filled with the above set data in components. Display a confirmation alert message.

13. Add a segmented button component with two buttons: **New** and **List**. Clicking the **New** button will display the above form of input.

14. Clicking the **List segmented button** will display all entries in array List. Display each entry as **ion-accordion-group** with the **Brand** name as the header value and if accordion is expanded then display all other information.

15. Swipe the List element to left to display **delete** button. Clicking the delete button removes the element from array list (and the view). You may use the method **Splice** and passing the index of item to be removed.

16. **Optional**. Swipe the List element to right to display **Edit** button. Clicking the Edit button will show an alert message box with laptop inputs to edit the selected list element values. The alert message box should contain: Brand input box, button '**Ok'** and button '**Cancel'**. Show two buttons [OK and Cancel] in the alert. The Ok will accept the changes, while the cancel will reject the changes.

    - Specify a **header**
    - Specify a **message**: 'Edit'
    - Determine two **buttons** ['ok', 'Cancel'].
    - Specify **input** of new Brand name.
    - Handler? To handle the clicking of buttons.

17. **Optional**: Edit at least 5 other component values in the alert message box.

Example

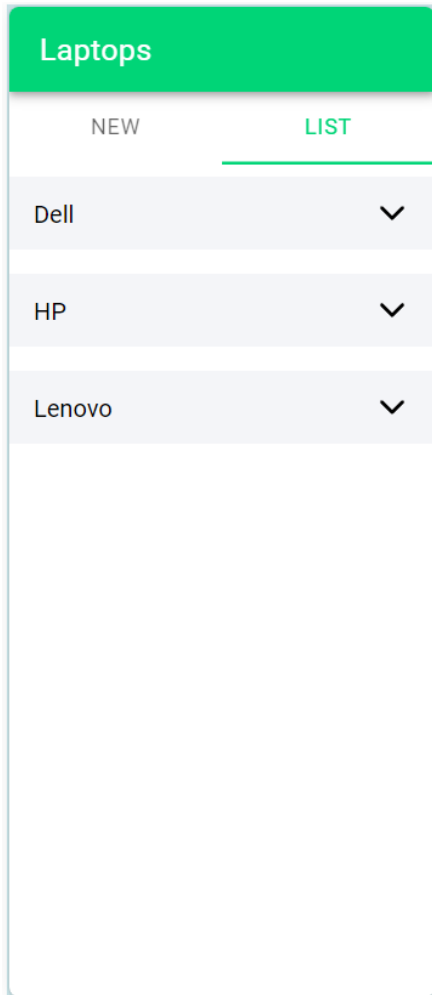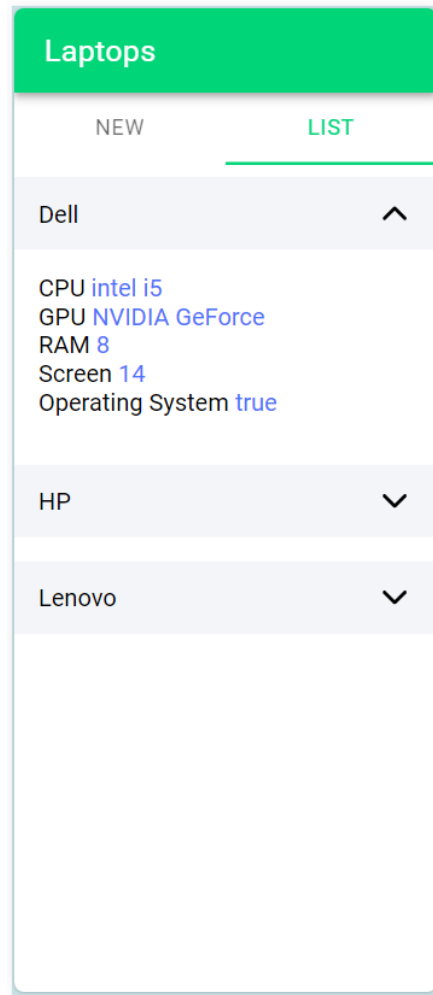**Figure 3:** Filled Form

Figure 4: Add button clicked

Figure 5: Button List clicked

Figure 6: Accordion arrow expanded