Manual Testing
Session-4

System Testing Types

```
        ┌─────────────────────────┐
        │     System Testing      │
        └─────────────────────────┘
              │
              │    ┌─────────────────────────┐
              ├──→ │       GUI Testing       │
              │    └─────────────────────────┘
              │
              │    ┌─────────────────────────┐
              ├──→ │     Usability Testing   │
              │    └─────────────────────────┘
              │
              │    ┌─────────────────────────┐
              ├──→ │    Functional Testing   │
              │    └─────────────────────────┘
              │
              │    ┌─────────────────────────┐
              └──→ │     Non-Functional      │
                   │        Testing          │
                   └─────────────────────────┘
```
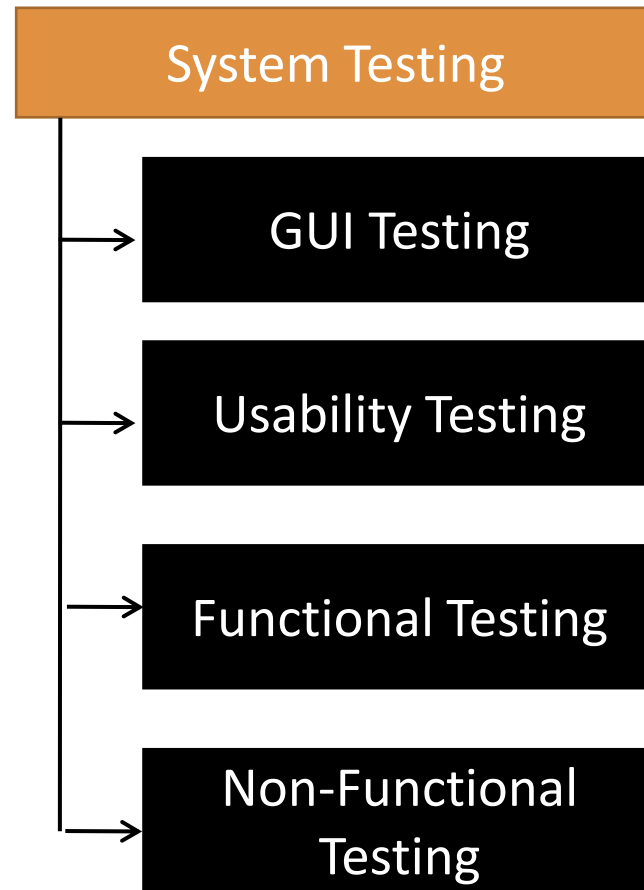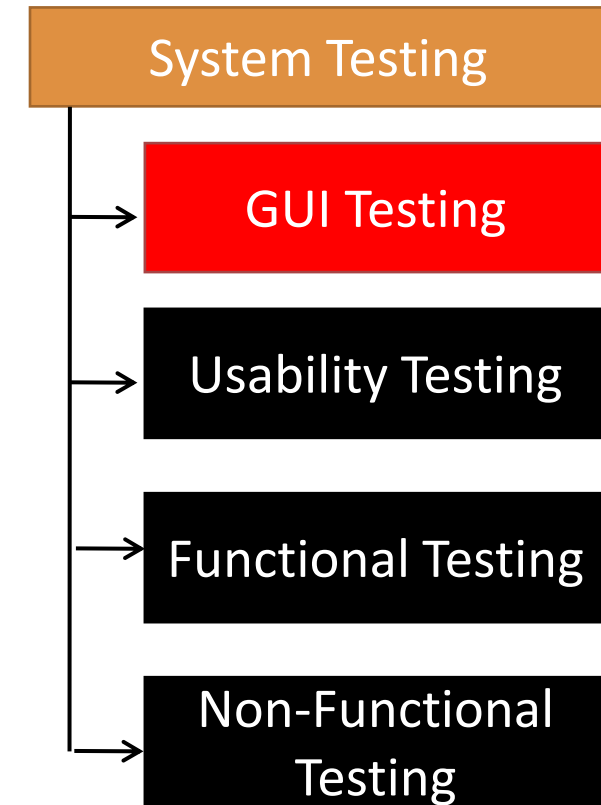
What is GUI Testing?

- **Graphical User-interface Testing** or **GUI testing** is a process of **testing** the user interface of an application.

- A **graphical user interface** includes all the elements such as menus, checkbox, buttons, colors, fonts, sizes, icons, content, and images.

System Testing

→ GUI Testing

→ Usability Testing

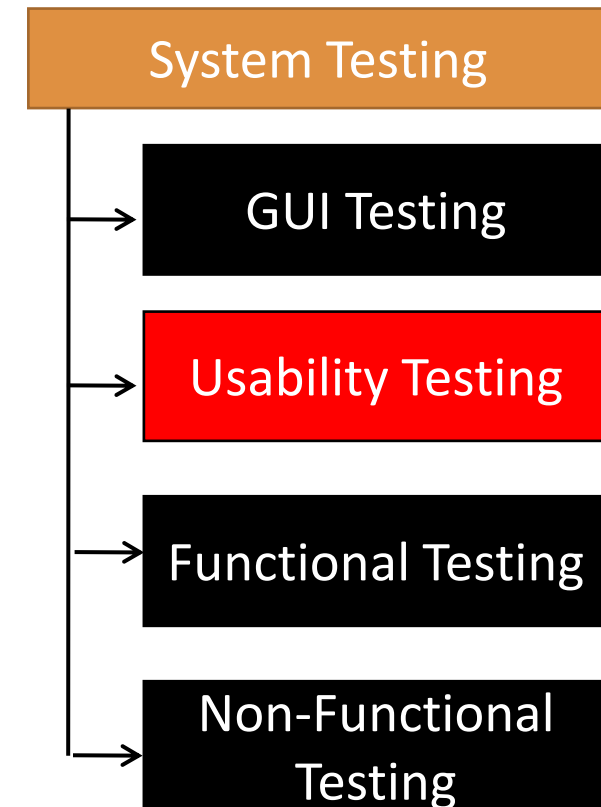→ Functional Testing

→ Non-Functional Testing

GUI Testing Checklist

- Testing the size, position, width, height of the elements.
- Testing of the error messages that are getting displayed.
- Testing the different sections of the screen.
- Testing of the font whether it is readable or not.
- Testing of the screen in different resolutions with the help of zooming in and zooming out.
- Testing the alignment of the texts and other elements like icons, buttons, etc. are in proper place or not.
- Testing the colors of the fonts.
- Testing whether the image has good clarity or not.
- Testing the alignment of the images.
- Testing of the spelling.
- The user must not get frustrated while using the system interface.
- Testing whether the interface is attractive or not.
- Testing of the scrollbars according to the size of the page if any.
- Testing of the disabled fields if any.
- Testing of the size of the images.
- Testing of the headings whether it is properly aligned or not.
- Testing of the color of the hyperlink.
- Testing UI Elements like button, textbox, text area, check box, radio buttons, drop downs ,links etc.
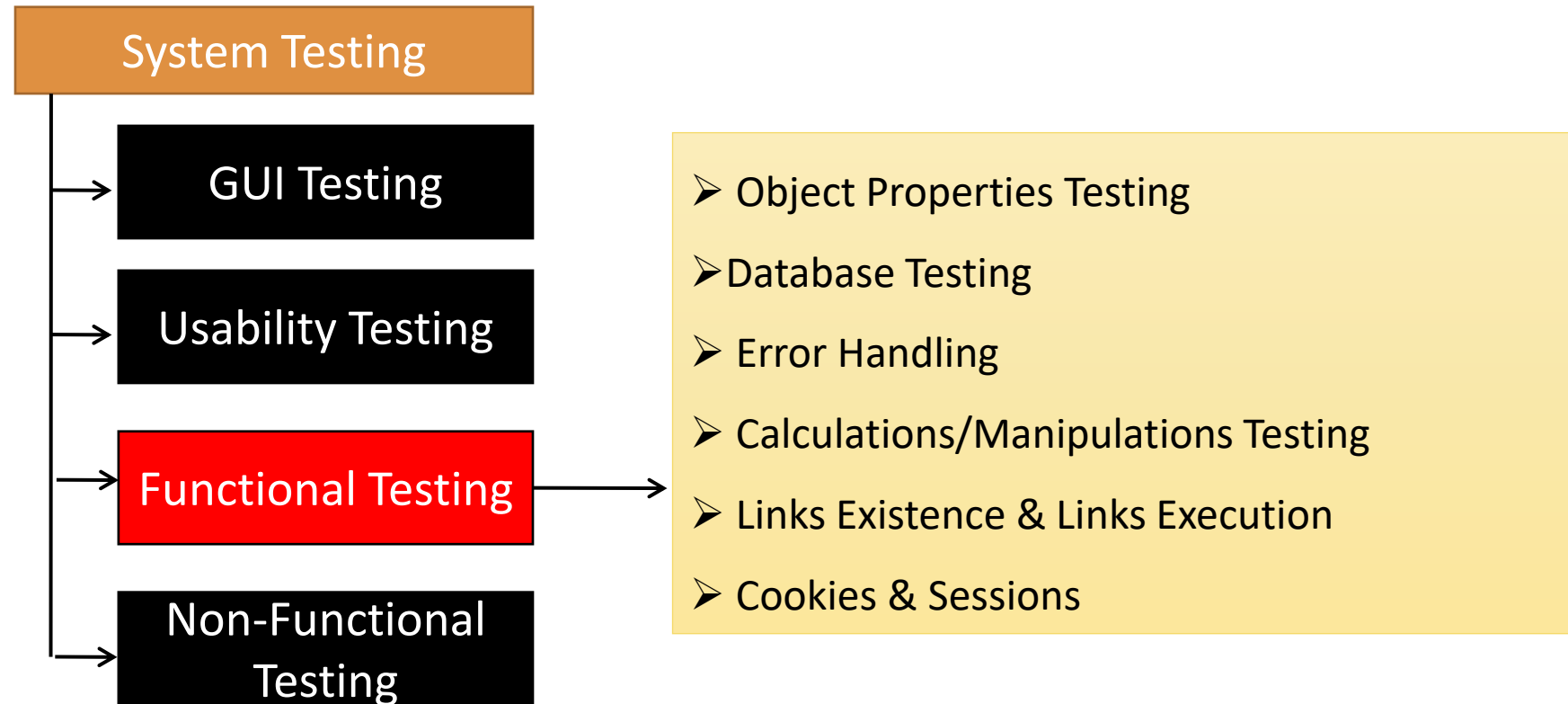
Usability Testing

- During this testing validates application provided context sensitive help or not to the user.

- Checks how easily the end users are able to understand and operate the application is called usability testing.
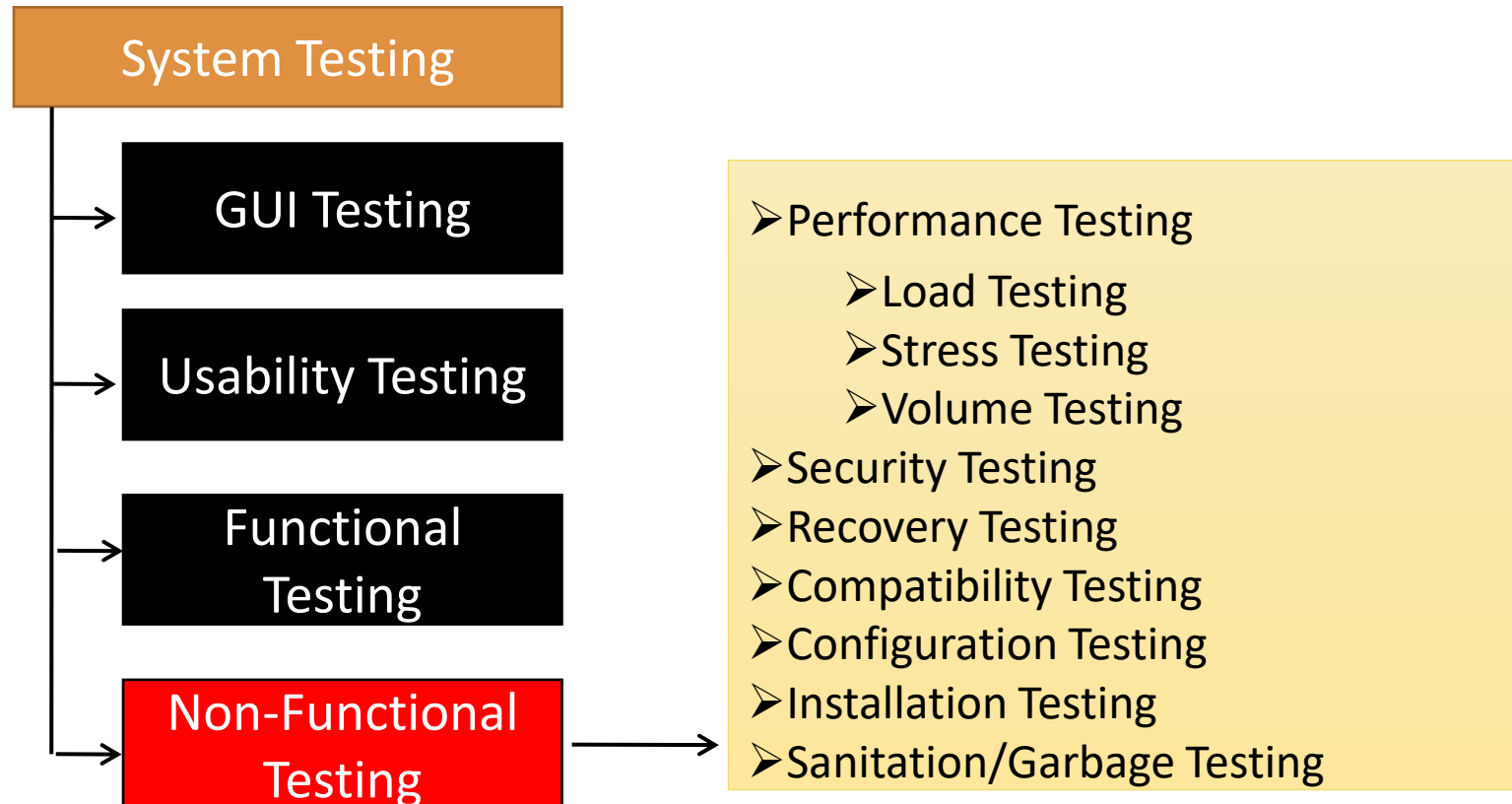
System Testing
GUI Testing
Usability Testing
Functional Testing
Non-Functional Testing

Functional Testing

▪ Functionality is nothing but behavior of application.

▪ Functional testing talks about how your feature should work.

System Testing

GUI Testing

Usability Testing

Functional Testing

Non-Functional Testing

➢ Object Properties Testing

➢ Database Testing

➢ Error Handling

➢ Calculations/Manipulations Testing

➢ Links Existence & Links Execution

➢ Cookies & Sessions

Non-Functional Testing

- Once the application functionality is stable then we do Non-Functional testing.

- Focus on performance, load it can take and security etc.

System Testing

- GUI Testing
- Usability Testing
- Functional Testing
- Non-Functional Testing

> Performance Testing
> > Load Testing
> > Stress Testing
> > Volume Testing
> Security Testing
> Recovery Testing
> Compatibility Testing
> Configuration Testing
> Installation Testing
> Sanitation/Garbage Testing

Functional Testing Vs Non-Functional Testing

Functional Testing	Non-functional Testing
▪ Validates functionality of Software. ▪ Functionality describes what software does. ▪ Concentrates on user requirement. ▪ Functional testing takes place before Non-functional testing.	▪ Verify the performance, security, reliability of the software. ▪ Non-Functionality describes how software works. ▪ Concentrates on user expectation. ▪ Non-Functional testing performed after finishing Functional testing.