***GUI testing:***

Interface means the face of an object. The look of an object, here we mean an application’s interface, the home page or any web page gives the first impression to the user about its quality at first sight. So, whatever the user sees in an interface is called user interface. The user can navigate from links to pages to boxes to images and so on, and work with the application for personal use. But to test the graphics of that interface whether the functionality of all the GUI objects are up to the mark is a tester’s job to do and it can be done by GUI testing. Testers has to develop test cases for each GUI object testing by using testing tools selenium, UTP etc.

**The GUI objects are as follows:**

* Links
* Pages/ web pages
* Frame
* Web browser
* Web grid
* Web table
* Buttons
* Check box
* Combo box
* Drop down list
* Active/ inactive button
* Option
* Edit button
* Images
* Video clips etc.

**Let’s discuss about how to check the functionality of the GUI objects.**

* First we do naked eye examination for the created interface to evaluate **cosmetically** and measure if all the fields in a home page are present or missing and is in the proper place where it should be, their dimension, color resolution, text characters, fonts, language etc. for example; the login button, search button, contact button, home button, sign in , register, links, slideshows, video box and others placed in the exact same place where it should be according to SRS, BRD, TRD, DDD and other documents.
* **Links:** It navigates us to a particular page or other web page. We can check if the link is taking us to the desired page or not. At the same time, we should also check for any broken link, inappropriate, invalid or missing links.
* **Page/web page:** We can roam around from one link to different links or buttons to check every time it takes us to the desired page, open the page in desired time frame, completeness for opening a new page.
* **Buttons:** Lot of buttons are there for the users to execute different functions of their interest. Such as, submit, no thanks, may be later, edit, save, open, about us, contact, join us on FB/ Twitter etc. Testers check their functionality if each button are properly functioning without any defect.
* **Dropdown box:** Most often for a given box, input data are in a dropdown list that appears when that box is clicked. We make sure if the dropdown appears with correct functionality. Ex: for registering a new user during sign up, security question box gives a dropdown list of questions to be chosen by the user and an answer should be given in the answer box.
* **Boxes:** To check the sizes of the boxes, overlapping on neighboring field or not, title of the box and others. Testers also check the input data given in the requirements, such as if a box contains alphabetical, numerical or alphanumerical characters. If there must be at least one capital and one numerical value or restriction s on using any special characters or spaces. If there is a specified character length for that box.
* **Check box:** Sometimes there are boxes to be check marked to agree with some company statements, receive email notifications, software install in a recommended or customized way, gender, age group, veteran status, ethnicity, raised in which geographical location and others.
* **Active/ Inactive buttons:** In some applications, there are multiple boxes that can be accessed and some are not. We should test if the accessible boxes are readily accessed with proper input. Inaccessible boxes also should be checked if it is accessible accidentally.
* **Option:** Also in some applications there are multiple options, only one can be checked and by doing that other options will remain inactive.
* **Edit:** By clicking the edit button we shall check if it allows to edit wrong information or data, and it can be saved safely.
* **Images:** If there are image boxes, check their size, clarity, alignment, texture, resolution, image quality, download option, slideshow option, zoom in /out etc.
* **Videos:** If there is any video clip in addition to slideshow, check its quality, clarity, sound quality, sound control, view size and so on.

**Prepared by Dr. Arif**