

SCREENCOMPARER

How does this Application Work ?

1. When the application is run for the **first time** on any system, a folder named **"ScreenComparisons"** is created in the directory where the application file (.exe file) is saved.
2. All the subsequent directories will be stored within **"ScreenComparisons"** directory.
3. Whenever the application is run, every time a folder named after the timestamp of the system is created. The format of the name of that folder is **'YYYY-MM-DD_HH-MM-SS'**.
4. The GUI provides two buttons.
 - a. **Baseline** : To take the screenshots for Baseline Images
 - b. **Actual** : To take the screenshots for Actual Images based on the baseline image
5. When **'Baseline'** button is clicked for the *first time*, **'Comarison1'** folder gets created within **'YYYY-MM-DD_HH-MM-SS'** folder.
6. Within **'Comparison1'** folder, a Folder **'Baseline'** is created. Within this folder, three png files are stored. Namely :
 - a. *pic_1.png* (Screen of Primary Monitor)
 - b. *pic_2.png* (Screen of Second Monitor)
 - c. *baseline.png* (difference between both screens is marked)
7. Now, for this baseline image, the user needs to make actual comparisons.
8. For that, click on the **'Actual'** button. A folder named **'Actual1'** would get created in **'Comparison1'** folder for *first* comparison. Within this folder, three png files are stored. Namely :
 - a. *pic_1.png* (Screen of Primary Monitor)
 - b. *pic_2.png* (Screen of Second Monitor)
 - c. *difference.png* (difference between both screens is marked)
9. To make more comparisons based on the current Baseline, keep clicking **'Actual'** button. Folders named **Actual2, Actual3,.....** and so on will get created.
10. If the user wants to take a new Baseline, click on the **'Baseline'** button. This will create **'Comparison2'** folder within **'YYYY-MM-DD_HH-MM-SS'** folder.
11. Then repeat the **Steps 7 to 9** for subsequent actual comparisons.
12. If the user exits the application and runs it again, application would follow the steps from **Step 3 and beyond**.
13. If the user consecutively clicks on **'Baseline'** button without clicking on Actual button, those many **'Comparison'** folders will be created. For example :
 - a. If user clicks on **'Baseline'** button for first time : **'Comparison1'** folder is created. In this folder, **'Baseline'** Folder is created and images are saved.
 - b. Now user is supposed to click on **'Actual'** button to make actual comparisons based on the current baseline. Instead if he clicks on **'Baseline'** button **again**, **'Comparison2'** folder will be created. In that folder, **'Baseline'** Folder will be created and images will be stored in that.
 - c. Now, if the user clicks on **'Actual'** Button, those folders will be created in the **latest created Comparison folder**, which in this case is **'Comparison2'**, and not in **'Comparison1'**.
14. If error occurs while taking screenshot for Baseline Images, the respective **'Comparison'** Folder will be deleted to avoid redundancy.
15. Similarly, if error occurs while taking screenshot for Actual images, the respective Actual Folder will be deleted.

16. Following Diagram displays the creation of folders :

