- initialize (Creat "objects" folder & "index" file)

57

before

```
11 void textInitialize() java.in.filedutfoundscoption: textFile1.txt (he such file or directory) algorithm for production textFile1.txt (he such file or directory) algorithm is Filedutfoundscoption textFile1 (he such file or directory) algorithm for filedutfoundscoption: textFile1 (he such file or directory) algorithm for filedutfoundscoption textFile1 (he such file or directory) algorithm for filedutfoundscoption textFile1 (he such file or directory) algorithm for filedutfoundscoption (he such filedutfoundscoption filedutfoundscoption for algorithm for filedutfoundscoption for algorithm filedutfoundscoption for algorithm filedutfoundscoption for algorithm filedutfoundscoption for the filedutfoundscoption for filedutfoundscoption for filedutfoundscoption for filedutfoundscoption for filedutfoundscoption for filedutfoundscoption filedutfoundscoption for filedutfoundscoption for filedutfoundscoption for filedutfoundscoption for filedutfoundscoption filedutfoundscoption filedutfoundscoption filedutfoundscoption for filedutfoundscoption filedutfou
```

```
after
```

```
@Test
@DisplayName("Testing index File and 'object' Folder Creation")
void testInitialize() throws IOException
{
    //Index index = new Index();
    index.initialize();
    File file = new File(pathname:"index");
    Path path = Paths.get(first:"objects");
    //assertTrue(file.isDirectory());

assertTrue(file.exists());
assertTrue(Files.exists(path));
```

changes

```
public void initialize (String fileName)
public void initialize () throws IOException
{
    File file = new File (fileName);
    if (!file.exists() I! !file.isDirectory())

    File path = new File("objects");
    path.mkdirs();
    File file = new File ("index");
    //String path = "objects" + File.separator + "index";
    if (!file.exists())
    {
        File newFile = new File("index");
        //File newFile = new File ("index");
        //File newFile = new File ("index");
```

- add file to index given filename

Before After

```
void checkIndexAdd() throws Throwable
                                                                                                                                       @Test
                                                                                                                     void checkIndexAdd() throws Throwable
             index.addBlobs(fileName:"file1");
             String actual = readFile(fileName:"index");
132
             String expected = "file1" + " : " + "53d45fe9bb51b94c43b04b6fcbc0d8aa874c9ed6": //SHA1 of the content
                                                                                                                                            index.addBlobs(fileName:"file1");
                                                                                                                        130
             assertEquals(expected, actual); Expected [file1 : 53d45fe9bb51b94c43b04b6fcbc0d8aa874c9ed6] but was
                                                                                                                                            String actual = readFile(fileName:"index");
Expected [file1:53d45fe9bb51b94c43b04b6fcbc0d8aa874c9ed6] but was [file1:60b27f004e454aca81... checkindex.... \uparrow \downarrow \circlearrowleft \mid \hat{\parallel} \mid
                                                                                                                                            String expected = "file1" + " : " + "53d45fe9bb51b94c43b04b6fc
  1-file1:
                                                                                                                                            assertEquals(expected, actual);
   -53d45fe9bb51b94c43b04b6fcbc0d8<u>aa874c9ed6</u>
                                                     +60b27f004e454aca81b0480209cce5081ec52390
```

changes

- remove file from index given filename

Before

```
void checkIndexRemove() throws Throwable
{
    index.addBlobs(fileName:"file1");
    index.removeBlob(fileName:"file1");
    index.removeBlob(fileName:"index");
    String actual = readFile(fileName:"index");
    String expected = "";
    assertEquals(expected, actual); org.opentestdj.AssertionFalledError: expecteds: [] but was: [file1:
    org.opentestdj.AssertionFalledError: expected: [] but was: [file1:53d45fe9bb51b94c43b04b6fcbc0d8aa874c... checkl... ↑ ♦ ○ | □ forg.opentestdj.AssertionFalledError: expected: [] but was: [file1:53d45fe9bb51b94c43b04b6fcbc0d8aa874c... checkl... ↑ ♦ ○ | □ forg.opentestdj.AssertionFalledError: expected: [] but was: [file1:53d45fe9bb51b94c43b04b6fcbc0d8aa874c... checkl... ↑ ♦ ○ | □ forg.opentestdj.AssertionFalledError: expected: [] but was: [file1:53d45fe9bb51b94c43b04b6fcbc0d8aa874c... checkl... ↑ ♦ ○ | □ forg.opentestdj.AssertionFalledError: expected: [] but was: [file1:53d45fe9bb51b94c43b04b6fcbc0d8aa874c... checkl... ↑ ♦ ○ | □ forg.opentestdj.AssertionFalledError: expected: [] but was: [file1:53d45fe9bb51b94c43b04b6fcbc0d8aa874c... checkl... ↑ ♦ ○ | □ forg.opentestdj.AssertionFalledError: expected: [] but was: [file1:53d45fe9bb51b94c43b04b6fcbc0d8aa874c... checkl... ↑ ♦ ○ | □ forg.opentestdj.AssertionFalledError: expected: [] but was: [file1:53d45fe9bb51b94c43b04b6fcbc0d8aa874c... checkl... ↑ ♦ ○ | □ forg.opentestdj.AssertionFalledError: expected: [] but was: [file1:53d45fe9bb51b94c43b04b6fcbc0d8aa874c... checkl... ↑ ♦ ○ | □ forg.opentestdj.AssertionFalledError: expected: [] but was: [file1:53d45fe9bb51b94c43b04b6fcbc0d8aa874c... checkl... ↑ ♦ ○ | □ forg.opentestdj.AssertionFalledError: expected: [] but was: [file1:53d45fe9bb51b94c43b04b6fcbc0d8aa874c... checkl... ↑ ♦ ○ | □ forg.opentestdj.AssertionFalledError: expected: [] but was: [file1:53d45fe9bb51b94c43b04b6fcbc0d8aa874c... checkl... ↑ ♦ ○ | □ forg.opentestdj.AssertionFalledError: expected: [] but was: [file1:53d45fe9bb51b94c43b04b6fcbc0d8aa874c... checkl... ↑ ♦ ○ | □ forg.opentestdj.AssertionFalledError: expected: [] b
```

After

```
### Official Name:

### O
```

Changes

```
@@ -9,10 +9,11 @@
         private HashMap <String, String> hm;
         private PrintWriter pw;
          public Index() throws FileNotFoundException
         public Index() throws IOException
             hm = new HashMap <String, String> ();
              pw = new PrintWriter ("index");
              pw = new PrintWriter (new FileWriter("index", false));
         public void initialize () throws IOException
00 -33,7 +34,7 €€
              String content = Blob.fileToString(fileName);
              String s = Blob.encryptPassword(content);
              hm.put (fileName, s);
             hm.put(fileName, s);
              for (HashMap.Entry <String, String> entry : hm.entrySet ())
00 -43,14 +44,19 00
```

remove Blob Before

void testRemoveBlob() throws

```
After
```

```
@Test
              index.addBlobs(fileName:"file1");
                                                                                                                                        void testRemoveBlob() throws Throwable {
              index.removeBlob(fileName:"file1");
                                                                                                                                             index.addBlobs(fileName:"file1");
              File file = new File(parent:"objects", child:"53d45fe9bb51b94c43b04b6fcbc0d8aa874c9ed6");
                                                                                                                                             index.removeBlob(fileName:"file1");
              assertTrue(!file.exists()); .... java.lang.AssertionError at IndexTest.testRemoveBlob(IndexTest.java:130)
java.lang.AssertionError at IndexTest.testRemoveBlob(IndexTest.java:130) at java.base/java.util.ArrayList.forEa... testRem... 🔨 🗸 🗓 👘 🖺
                                                                                                                                            File file = new File(parent: "objects", child: "53d45fe9bb51b94c43b04b6fcbc0d8aa874c9ed6");
java.lang.AssertionError
                                                                                                             ∨ ⊗ ⊖ t.
at IndexTest.testRemoveBlob(IndexTest.java:130)
                                                                                                                                             assertTrue(!file.exists());
at java.base/java.util.ArrayList.forEach(ArrayList.java:1511)
                                                                                                                 java..
at java.base/java.util.ArrayList.forEach(ArrayList.java:1511)
```

changes

```
Unsta
00 -44,8 +44,17 00
              pw.close();
          public void removeBlob (String fileName) throws IOException
          public void removeBlob (String fileName) throws Throwable
              File file = new File(fileName);
              if (file.exists())
                  String content = Blob.fileToString(fileName);
                  String s = Blob.encryptPassword(content);
                  File doomedFile = new File ("objects", s);
                  doomedFile.delete();
              hm.remove(fileName);
              if(hm.isEmpty())
```

12/12 tests passed (100%) ✓ ✓ III AllieGitProject 121ms ∨ ∅ { } < Default Package > 1... ∨ ✓ ✓ BlobTest 8.0ms √ ✓ ✓ ✓ TreeTest 14ms