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SUBJECT
GRADE
EXAMINER

Information Technology
11 Practical

DATE
MARKS
DURATION
MODERATOR

June 2022
100
2 Hours
Ms Kench

NAME	
CLASS	

PET SOCIAL MEDIA

//1.1 [1]

```
public class Post✓
{
```

//1.2 [4]

```
private LocalDateTime time; ✓ private ✓correct int and String types
private int postNo; ✓correct names ✓Time type
private String userName;
private int type;
private String message;
```

//1.3 [3]

```
public static int POST = 1; ✓public ✓static ✓capitals
public static int RESPONSE = 0;
```

//1.4 [3]

```
private static int numThreads = 0; ✓private ✓static
private static String postThreads = "#"; ✓correct initial value
```

//1.5 [3]

```
public Post✓ (LocalTime t, int pN, String uN, int tp, String m) ✓
{
```

```
    time = t; ✓
    postNo = pN;
    userName = uN;
    type = tp;
    message = m;
```

//1.5.1 [9]

```
    if (type✓ == RESPONSE✓ &&✓ (postThreads.contains✓ ("#" + pN +
    "#"✓) == false) ✓)
```

```
    {
        postThreads = postThreads + pN✓ + "#";✓
        numThreads++;✓
    }
}
```

//1.6 [4]

```
public int getPostNo() ✓ one mark for each method
```

```
{
    return postNo;
}
```

```
public static int getNumThreads()✓ ✓both methods are static
```

```
{
    return numThreads;
}
```

```
public static String getPostThreads()✓
```

```
{
    return postThreads;
}
```

//3.1 [2]

```
private String✓ scrambleWord(String w✓)
{
```

```

//3.1.1 [4]
char first✓ = w.charAt(0); ✓
char last✓ = w.charAt(w.length()-1); ✓ could also be String
String newWord = "";
int rand = 0;
int numChars = w.length();
//3.1.2 [2]
if (numChars✓ <= 3) could use w.length();
{
    newWord = w; ✓
}
//3.1.3 [4]
else✓ if (numChars == 4) ✓
{
    newWord = "" + first✓ + w.charAt(2) ✓ + w.charAt(1) +
last;
}
//3.1.4 [10]
else if (numChars >= 5) ✓
{
    newWord = "" + first;
    w = w.substring(1,w.length()-1);
    int lenW = w.length();
    while✓ ( lenW > 0) ✓ could use any loop and any method to
randomly choose a character and add to the word as long as the
character is not repeated
    {
        rand = (int) (Math.random()✓*(lenW)); ✓
        newWord = newWord + w.charAt(rand); ✓
        w = w.substring(0,rand) ✓ + w.substring(rand+1); ✓
        lenW = w.length();✓
    }
    newWord = newWord + last; ✓
}
return newWord;
}

//3.2 [2]
public String✓ scrambleMessage()✓
{
    //3.2.1 [4]
    Scanner scLine✓ = new Scanner(message); ✓ accept any valid
method to break up the string
    String word = "", temp = "";

    while(scLine.hasNext())✓
    {
        word = scLine.next();✓
        //3.2.2 [3]
        temp = temp + scrambleWord✓ (word) ✓ + " "✓;
    }
    return temp;
}

```

//1.7 [8]

```

public String toString() ✓
{
    String temp = "";
    if(type ✓ == RESPONSE) ✓
    {
        temp = temp + "\t"; ✓
    }

    temp = temp + time + " " + postNo + " " + userName + " -- " +
message + " -- " ✓✓ correct fields ✓ correct format
    + scrambleMessage(); //3.3 [2] ✓ method call ✓ correct format
    return temp; ✓
}
}

```

//2.1 [1]

```

public class PostUI ✓
{

```

```

    public static void main(String[] args)
    {

```

//2.2.1 [4+]

```

try ✓
{
    Scanner scFile = new Scanner ✓ (new File("Pets.txt")); ✓
    String line, user, mess, tStr;
    int pNo;
    Post post = null;
    //4.1.1 [2]
    int postNum = Integer.parseInt ✓
(JOptionPane.showInputDialog("Enter a post number") ✓);
    String postList = "";
    while (scFile.hasNext()) ✓
    {
        //2.2.2 [1]
        line = scFile.nextLine(); ✓
        //2.2.3 [4]
        Scanner scLine = new Scanner(line).useDelimiter("%"); ✓
        String tt = scLine.next(); ✓
        LocalTime lt = LocalTime.parse(tt, ✓
DateTimeFormatter.ofPattern("HH:mm:ss")); ✓
        //2.2.4 [3]
        pNo = scLine.nextInt(); ✓
        user = scLine.next(); ✓
        tStr = scLine.next(); ✓ -1 for each missing field
        mess = scLine.next();
        //2.2.5 [4]
        if(tStr.equals("P")) ✓
        {
            post = new Post(lt, pNo, user, Post.POST ✓, mess); ✓
        }
    }
}

```

```

else
{
    post = new Post(lt,pNo,user,Post.RESPONSE✓,mess);
}
//2.3 [2]
System.out.println✓ (post✓);
//4.1.2 [4]
if(postNum✓ == post.getPostNo())✓
{
    postList = postList✓ + post.toString()✓ + "\n";
}

}
scFile.close();
//2.4 [4]
System.out.println("\nPosts with threads✓ " +
Post.getPostThreads()✓);
System.out.println("Number of posts with threads✓ " +
Post.getNumThreads())✓;

//4.1.3 [2]
System.out.println("\nPosts matching "✓ + postNum + "\n" +
postList✓);

//2.2.1 [+1]
} catch (FileNotFoundException ex)
{
    System.out.println("File not found");✓
}
}
}

```