

Knowledge Test K6

COMP 4081 • Software Engineering • Fall 2019

Solutions

Name: _____, _____
Last name First name

Rules:

- No potty breaks.
- Turn off cell phones/devices.
- Closed book, closed note, closed neighbor.
- WEIRD! Do not write on the backs of pages. If you need more pages, ask me for some.

Reminders:

- Verify that you have all pages.
- Don't forget to write your name.
- Read each question carefully.
- Don't forget to answer every question.

1. [1] What is a *user story*?
- a) A user testimonial about how a piece of software helped them on a task
 - b) An instructional story for training users on a piece of software
 - c) A chunk of functionality (some people use the word *feature*) that is of value to the customer

2. [1] Which of the following is not one of the main parts of a user story?

- a) description
- b) references
- c) title

3. [2] Complete this familiar template.

As a who, I want what, so that why

4. [2] Based on the quality criteria for user stories discussed in class, what is wrong with the following?

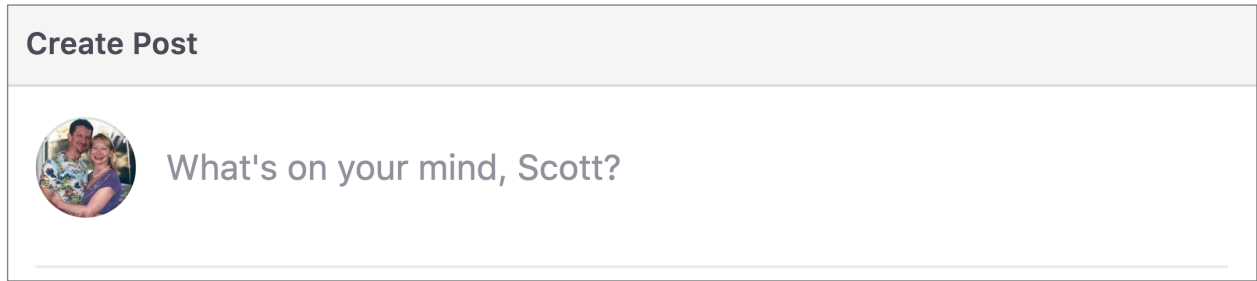
As a user, I want a help button, so that I can get immediate help from customer support.

- a) Too short, not detailed enough
- b) Uses technical jargon that a customer might not understand
- c) Mentions specific implementation technologies or user-interface elements

5. [5 × 1] Label each of the following with a *F* if it is a functional requirement and an *NF* if it is a non-functional requirement.

- a) NF The system must process requests in 1 second or less.
- b) F As a teacher, I want to create a quiz, so that students can practice the material.
- c) NF All code written to implement the system must adhere to the project's style guide.
- d) NF Users must be able to perform common tasks with two or fewer clicks.
- e) F The system must enable managers to search for employee information by last name.

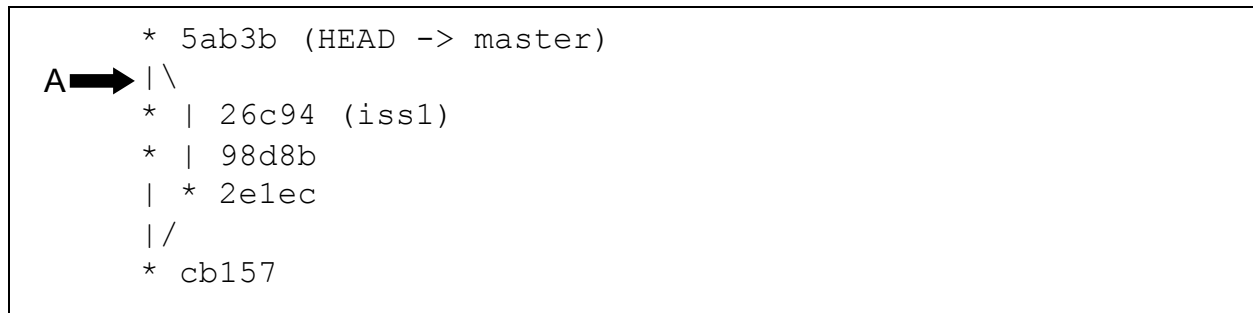
6. [9] Write a user story for the following familiar Facebook feature. Include the two main parts of a US and follow all templates discussed in class.



Title: Create Post

Description: As a user, I want to create a post, so that my followers will know what I'm thinking.

Consider this Git log graph in answering the following questions.



7. [1] Which branch was the user on when they made commit 2e1ec?

master

8. [1] Which branch was the user on when they made commit 98d8b?

iss1

9. [1] Which branch was the user on when they made commit 5ab3b?

master

10. [2] At the point labeled A, what happened? (Fill in the blanks to answer.)

iss1 **was** merged **into** master
(a branch) (a verb, past tense) (a branch)

11. [5] List all the commits that are in both the `master` branch's version history and the `iss1` branch's version history.

cb157, 98d8b, 26c94

Bonus Problems

Each of the following problems presents a Git log graph (log messages omitted) of a local repo and a scenario. Give the updated graph that would result from each scenario.

- If you need to add a commit, use the hash `c1c1c`.
- If a command would be rejected by GitHub (e.g., because the remote contains work that you do not have locally), write “REJECTED” on the top line.
- Assume that all remote bookmarks depicted are up to date.

1. [5] Scenario: Developer makes changes to the code, stages the changes, and commits.

```
* 37da5 (master)
| * a9e9c (HEAD -> iss1)
| * 3f2fd
| /
* dc268
```

```
* c1c1c (HEAD -> iss1)
* | 37da5 (master)
| * a9e9c
| * 3f2fd
| /
* dc268
```

2. [5] Scenario: Developer runs `git merge master`. Assume that auto-merge, if used, would complete successfully with no merge conflicts.

```
* 37da5 (master)
| * a9e9c (HEAD -> iss1)
| * 3f2fd
| /
* dc268
```

*** c1c1c (HEAD -> iss1)**

/ |

*** | 37da5 (master)**

| * a9e9c

| * 3f2fd

| /

*** dc268**

3. [5] Scenario: Developer runs `git merge iss1`. Assume that auto-merge, if used, would complete successfully with no merge conflicts.

```
* 37da5 (iss2)
| * a9e9c (iss1)
| * 3f2fd
| /
* dc268 (HEAD -> master)
```

```
* 37da5 (iss2)
| * a9e9c (iss1, HEAD -> master)
| * 3f2fd
| /
* dc268
```
