

## 1. Agile

CodeChuckle is a startup whose product is GiggleGit, a version control system “where merges are managed by memes.” (It saddens me to say that this was a joke written by ChatGPT for 131)

You have just been hired as employee number  $n$  for some small number  $n$ . They have the dev chops to make a demo, but you are their first serious developer.

Here is a theme and an epic:

**Theme: Get GiggleGit demo into a stable enough alpha to start onboarding some adventurous clients**

**Epic: Onboarding experience**

**Complete the following tasks:**

**Complete these user stories:**

As a vanilla git power-user that has never seen GiggleGit before, I want to understand how GiggleGit differs from Git so I can decide if I want to incorporate it into my team’s workflow.

As a team lead onboarding an experienced GiggleGit user, I want to ensure that my team can quickly integrate into our team’s specific use of GiggleGit so they can be productive without friction

**Create a third user story, one task for this user story, and two associated tickets.**

As a developer evaluating GiggleGit for enterprise use, I want to understand its scalability and compatibility with our existing infrastructure so I can determine if it meets our organization’s needs.

**Task:** Evaluate GiggleGit’s scalability and compatibility.

**Tickets:**

- Write a comparison document showcasing how GiggleGit handles version control differently from Git
- Test GiggleGit in a large repository and assess its performance

**Tasks should be a single phrase. (As should themes and epics. See those provided.)**

**User stories should be one to three sentences.**

**Tickets should have a title consisting of a single phrase and details that are long enough to sufficiently describe what needs to be done. You do not need to assign points to the tickets**

**This is not a user story. Why not? What is it?**

**As a user I want to be able to authenticate on a new machine**

This is not a user story because it does not explain why the user needs this feature or how it benefits the workflow. Rather than a user story, this corresponds closer to a requirement or feature request.

## 2. Formal Requirements

CodeChuckle is introducing a new diff tool: SnickerSync—why merge in silence when you can sync with a snicker? The PMs have a solid understanding of what it means to "sync with a snicker" and now they want to run some user studies. Your team has already created a vanilla interface capable of syncing with the base GiggleGit packages.

**Complete the following tasks:**

**List one goal and one non-goal**

- **Goal:** *Provide a seamless experience by incorporating the 'snickering' concept to improve user feedback and collaboration.*
- **Non-Goal:** *This release will not implement a new version control system beyond the existing GiggleGit packages.*

**Create two non-functional requirements. Here are suggestions of things to think about:**

**Who has access to what**

**PMs need to be able to maintain the different snickering concepts**

**A user study needs to have random assignments of users between control groups and variants**

1. *Ensure only authorized users can modify snickering concepts and access sensitive data.*
2. *Ensure that user studies are conducted in a controlled and repeatable manner, maintaining data integrity.*

**For each non-functional requirement, create two functional requirements (for a grand total of four functional requirements).**

**1.1.** *Implement role-based access control (RBAC) so that only authorized PMs can modify snickering concepts.*

**1.2.** *Use OAuth to securely log-in users and enforce permissions.*

**2.1.** *Implement an algorithm for random assignment of users into control and experimental groups.*

**2.2** *Store experimental data in a database to prevent duplicate entries and ensure consistency in test groups.*