

US-Prompt for User Story Generation

Link to ChatGPT: <https://openai.com/chatgpt/>

Execution Guidelines:

- 1. Initial Reading:** Carefully read all the provided guidelines before starting the process..
- 2. Process Execution:** After understanding the instructions, proceed to perform all the listed activities.
- 3. Activities:** The process consists of several activities. For each activity, you will find: a description of the activity, instructions on what to do, the prompt to be entered, and the expected response from ChatGPT.
- 4. Customization:** The text in **red** refers to data related to your software product and must be modified in the prompt before being submitted to ChatGPT.
- 5. Interaction with ChatGPT:** The text in black contains standard instructions for the process. For these, you should simply read the current activity's prompt, copy and paste it into ChatGPT, and submit it.

Step-by-Step Execution Guide

1. Activity 1 (Presentation of the Dynamic)

- **Activity Description:** Introduce the purpose of the conversation.
- **Activity Instructions:** Enter the prompt into ChatGPT.

- **Prompt to enter:**

[Hello, Chat! Whenever I request an action, consider that I am conducting a software product discovery exercise. For any and all information I provide, study it, retain it, and respond exclusively with: "Understood" once you finish.]

- **Expected ChatGPT Response:** Understood.

2. Activity 2 (Presenting the Product)

- **Activity Description:** Presents the product vision to ChatGPT.
- **Activity Instructions:** Customize the product description and enter the prompt into ChatGPT.

- **Prompt to enter:**

[From now on, I will provide you with data collected from interviews or informal conversations with the client. Consider that the software I am building has the following product vision: "Insert here the idea of the software product you want to develop."]

- **Expected ChatGPT Response: Understood.**

3. Activity 3 (Presentation of Product Requirements)

- **Activity Description:** Presents the software requirements.
- **Activity Instructions:** Enter the prompt into ChatGPT.

- **Prompt to enter:**

[Consider that I collected the following information about the main users and the main desired actions for this system:

Users: List who the main users are (Who will use the software?)

- User 1
- User 2

Actions: List the main actions of each user (What can each one do?)

User 1:

- List here the actions of this type of user

User 2:

- List here the actions of this type of user]

- **Expected ChatGPT Response: Understood.**

4. Activity 4 (User Story Template)

- **Activity Description:** Informs the desired template for creating user stories.
- **Activity Instructions:** Enter the prompt into ChatGPT.

- **Prompt to enter:**

[I will provide you with a template for creating user stories. Use it to structure your response whenever you are asked to generate the maximum number of user stories possible.

Everything in CAPS is a placeholder. Every time you generate text, try to fit it into one of the placeholders I listed. Please preserve the exact format of the overall template, and at the end respond with "Understood".

User Story X : NAME OF USER STORY

- **User Story:** As a {TYPE OF USER},
I want to {PERFORM AN ACTION},
So that {EXPECTED RESULT}.]

• **Expected ChatGPT Response:** Understood.

5. Activity 5 (Quality Criteria for User Stories)

- **Activity Description:** Informs the desired criteria for creating user stories.
- **Activity Instructions:** Enter the prompt into ChatGPT.

• **Prompt to enter:**

[I will provide you with seven quality criteria and their definitions, based on the Quality User Story (QUS) framework by Lucassen et al. (2016). The goal is to guide the creation of well-defined user stories that adhere to these criteria. Note that the stories must strictly follow each criterion, and it is important to review each one to ensure they are clearly defined and comply with all definitions before considering them complete. Before finalizing, do another review of each story to ensure quality and adherence to the user story criteria.

- **Quality Criteria:**

1- **Well-Formed:** If the story includes at least one role (persona), which defines who is requesting the functionality, and a means (action), which is the specific activity or functionality the system must provide.

2- **Atomic:** If each story addresses a single specific functionality.

3- **Minimal:** If the story contains only one role, one means (e.g., "I want to open the interactive map"), and one or more ends, which are the goals the user aims to achieve using the functionality (e.g., "to easily locate tourist destinations"), without unnecessary information.

4- **Conceptually Sound:** If the means expresses a functionality, and the ends explain the reason for that functionality.

5- **Unambiguous:** If it avoids terms or abstractions that could lead to multiple interpretations.

6- **Complete Sentence:** If the story is complete, well-formed, and provides enough context to be clearly understood.

7- **Estimable:** If the story does not denote a coarse-grained requirement that is difficult to plan and prioritize.

- **Additional Guidelines:**

- Identifying Functionalities: Clearly identify the task or feature being requested. Make sure each functionality is isolated and clear.
- Creating Atomic Stories: Each story should deal with a single specific action. This facilitates planning, implementation, and estimation.
- Adjusting Structure: If a story includes two or more distinct functionalities, there will be two or more action verbs linked by “and”. In that case, you may split it into two or more separate stories. For example, the compound story “As a customer, I want to check my balance and withdraw money, so I can know how much I have and withdraw the necessary amount” should be divided into:
 - Atomic Story 1: As a customer, I want to check my balance, so I can know how much I have.
 - Atomic Story 2: As a customer, I want to withdraw money, so I can withdraw the necessary amount.
 - However, other action verbs can be considered as ends when they do not describe the main action of the story. They usually appear after a “so that” and describe the benefit or purpose of the action. For example, in the story below, “view” is the main verb and “check” and “repeat” are the expected outcomes:
 - Atomic Story 3: As a customer, I want to view my order history so that I can check past purchases and repeat orders easily.
- Criteria Validation: Check whether each story meets all the criteria: well-formed, atomic, minimal, conceptually sound, unambiguous, complete sentence, and estimable. If not, adjust the story until all criteria are met.
- Review and Refinement: After creating the stories, review each one to ensure it meets all the criteria, especially atomicity. If a story still addresses multiple functionalities, break it into smaller parts.]]

- **Expected ChatGPT Response: Understood.**

6. Activity 6 (Few-Shot Prompt)

- **Activity Description:** Presents some well-formed story examples to assist in the creation of user stories.
- **Activity Instructions:** Enter the prompt into ChatGPT.

- **Prompt to enter:**

[I will provide you with some examples of well-formed user stories to assist you in creating your own stories. Use them to structure your response whenever you are asked to generate the maximum number of user stories possible.]

- **Examples of Well-Defined Stories:**

- Atomic User Story 4: Create Tasks

- As a manager,

- I want to create tasks,

- So that I can add activities and assign them to the team.

- Atomic User Story 5: Update Tasks

- As a manager,

- I want to update tasks,

- So that I can modify details of existing activities as needed]

- **Expected ChatGPT Response: Understood.**

7. Activity 7 (User Story Generation)

- **Activity Description:** Requests the generation of user stories.

- **Activity Instructions:** Enter the prompt into ChatGPT.

- **Prompt to enter:**

[Acting as a Requirements Engineering expert with extensive experience in requirements elicitation. Consider all the information I have previously provided you about the software product I am building, as well as the template, criteria, guidelines, and examples I have given for creating user stories, and now, do not respond with just “Understood” — generate as many user stories as you can. Please also generate additional stories that take into account further aspects that could improve the user experience and the efficiency of the system, and clearly indicate that these are additional stories.]

- **Expected ChatGPT Response: Set of user stories following the template and requirements.**