

[Interview] AI Product Manager, Applications - Take Home Assignment

Objective

This take-home exercise assesses your ability to define a product vision, rapidly prototype a solution using AI coding tools, and document it effectively. We want to see your ability to leverage emerging technologies to build and communicate product ideas.

Scenario

We are working with a leading car insurance company to help them assess damage to cars as part of the claims process.

Your task is to design and build a basic prototype of an AI-powered car insurance claims experience that increases efficiency and accuracy at a lower cost to the insurance company.

Existing workflow

Assume this happens before our solution

- **Initial Claim Report:**
 - Policyholder contacts the insurance company (phone, website, app) to report an accident.
 - A claims agent gathers basic information (policy number, accident details, etc.).
- **Damage Documentation:**
 - Policyholder is instructed to submit photos or videos of the vehicle damage.

This is the flow we want to automate

- **Manual Review and Assessment:**
 - Claims agents manually review the submitted photos/videos.
 - They assess the extent of the damage (scratches, dents, structural damage).
 - They use their experience and knowledge to estimate repair costs.
 - They sometimes consult standardized repair cost databases or manuals.
- **Estimate Generation:**
 - The claims agent generates a detailed estimate of the repair costs.
- **Approval and Authorization:**

- The estimate is reviewed and approved by a senior claims adjuster.
- Authorization is given to proceed with repairs at an approved repair shop.

Assume this happens after our solution

- **Repair Process:**

- Policyholder takes the vehicle to the repair shop.
- The repair shop may conduct its own assessment and provide an estimate.
- The repair shop and the insurance company will negotiate the final price.

- **Final Inspection:**

- After repairs are completed, a final inspection may be conducted to ensure quality.
- The claim is then closed.

Your task

1. Prototype

- Using an AI coding tool (e.g., Cursor, v0, Bolt.new, Lovable), create a functional prototype demonstrating the core user flow for a **claims agent**.
- The prototype should include:
 - A basic user interface for initiating a claim.
 - Functionality to upload an image of the vehicle damage.
 - A simulated (AI-generated) response, such as a preliminary damage assessment or next steps.
 - While complete AI functionality is not required, the prototype should demonstrate how AI could be integrated into the claims process.
- You can mock the AI response if you'd like but make sure to describe the approach you would take in the PRD.
- Provide a link to a Github repo of the prototype as well as a recorded demo.

2. Product Requirements Document (PRD):

- Write a concise PRD (3 pages hard maximum) covering the following:
 - **Vision:** Briefly describe the product vision and goals.
 - **User Stories:** Define key user stories for the claims agent.
 - **Key Features:** List and describe the essential features of your AI-powered claims solution.
 - **Prioritization:** Explain your prioritization rationale for the features included.
 - **Success Metrics:** Define key performance indicators to measure the success of the product.
 - **AI integration:** Briefly describe the high level approach you would take to perform damage assessment using AI models. Please also clearly describe the human <> interaction.

Deliverables

- A link to your functional prototype or a recorded demo. If you provide a Github repo make sure the readme explains how to run the project.
- A PDF / Google Doc of your PRD (3 pages maximum).

Evaluation Criteria

- **Prototype:**
 - Functionality and user flow.
 - Effective use of the AI coding tool.
 - Demonstration of AI integration potential.
- **PRD:**
 - Clarity and conciseness of writing.
 - Alignment with the prototype design.
 - Strong product thinking and prioritization.
 - Relevant KPIs and consideration of ethical concerns.
 - How AI is thoughtfully incorporated into the product including the human<>AI interaction.
- **Presentation**
 - You will walk us through your PRD/prototype in a live interview.
 - While it's ok (and encouraged) to use AI to accomplish the assignment, make sure you can back up every decision.

This is an intentionally vague assignment. We want to see how you scope a vague project and lead our customers when they themselves may not know all the features they need.

Time allotment

- Please do not spend more than 3-4 hours on this project.
- We understand this is an ambitious project in the time allotted.
 - Please do NOT spend more time building additional features outside the core workflow. Focus on making the features you build thoughtful and solve the user's problem.
 - If there are additional features you think would be useful but don't have time to build, just write about them in the PRD
 - Please do NOT worry about the UI polish (how it looks), focus on the UX (how it works).
 - Please do NOT submit a PRD longer than 3 pages. Brevity is the soul of wit.