Hanwha AI Center Technical Test

Congratulations and thank you for your interest in our position.

The Technical Test will consist of two parts, with the first part being further divided into two sections.

1. **Prototyping:** The portion of the test is to demonstrate your ability to create a quick prototype for focus group testing. Please review the project/product description below (See "SCENARIO: PROJECT AQUA THISTLE") for the scenario and the test details below for the testing context and grading criteria.

   The Prototyping component will consist of two sections, each will be graded according to the grading criteria detailed below.
   a. **AI Agent Build:** To test your ability to create and/or prompt an AI Agent built for our prototype, we'd like you to demonstrate your ability to create an AI Agent using any tool or platform of your choice.
   b. **"App" or "Platform" Build:** To test your ability to create an "app" or "platform" to deliver a new service to our customers, we'd like you to create an app/platform that looks like the link below (Figma account required). Demo can be a web application or a dedicated mobile application.
   Link to Figma: https://tinyurl.com/y3b7jw57
   (If shortened link does not work, see below for full link)

   Combined, the AI Agent and App/Platform will require you to prioritize your work. Applicants are allowed to make creative decisions and make strategic additions and/or omissions. **An incomplete prototype is not a failed submission as you will be given the opportunity to explain your thought process on how to continue development in the next component.** Submissions however, will be compared with other submissions and their levels of completion.

2. **Interview / Walk Through:** At this stage, we'd like you to "show your work" on how you've built your demo. This is also a stage where in case the

prototype is incomplete or a component of your demo was not performing up to specifications, you'd be given the opportunity to explain how to rectify the situation.

Test Details:
- **Test Initiation:** Effective Immediately
- **Take-Home Assignment Deadline:** Friday, October 31st 2025 at 11:59PM PST - **No extensions**
- **Delivery Format:** AI Agent and "App/Platform" must be accessible to HAC staff to open and use for grading.
  - For a web application, please provide a link.
  - For a dedicated application, product must be for iOS. Please provide a link where HAC members can download and test the product.

Grading Criteria:
Please find below the grading criteria for the take-home component which amounts to 60 points. Not included is the Interview/Walk Through component that will add additional 40 points for a total of 100 points for the technical test.

AI Agent	Description	Points
User-Centric Response	Does the AI respond in a friendly, contextual, and human-like way (GenZ tone)? Does it feel like guidance rather than an answer dump?	10
Performance	Does the agent respond in a timely manner? How do the answers compare to other agents?	5
Logic	How does the AI Agent function? Can it behave in accordance with the scenario given below?	5
Technical	What technical steps were taken to build the AI Agent? If applicable, is there integration with the app/platform?	5
Information Hierarchy / Clarity	Are responses formatted clearly for readability? (Spacing, bullets, emphasis)	5
Total		30

App/ Platform	Description	Points
Performance	How does the App/Platform function? Can the App/Platform be used as a Proof of Concept for Focus Groups?	10
User Flow Logic	Is there a reasonable user journey from question to insight, to answers?	10
Technical	What technical steps were taken to build the App/Platform?	5
Information Visualization	Does the dashboard clearly communicate meaning through visuals?	5
Total		30

SCENARIO: PROJECT AQUA THISTLE

Prototype Description

The Hanwha AI Center is developing "PROJECT AQUA THISTLE (Working title)", a personalized mentorship application focused on empowering GenZ users to make better decisions in important life decisions. The purpose of this demo app is to demonstrate the conceptual direction and potential features/capabilities of what a fully developed "AQUA THISTLE" product could potentially do while providing a clickable and minimally usable/functional prototype that can be used to test critical success factors for the app's market demand.

Product Overview

PROJECT AQUA THISTLE's ultimate aim is to help GenZ users make better decisions for their future. Our product will help users:

- Find the unbiased answers to life's most pressing questions in a timely and accessible manner.
- Find out in advance what kind of important real life decisions you have to make so you can prepare in advance.
- Have an AI assistant/companion that will ensure that you're on the right track.

This product is designed to be mobile-first and will serve as the foundation for future integrations with other services such as personal wealth management, schedule management, and etc.

AQUA THISTLE's objective is to help build our future customer-base build healthy habits that will make it easier to convert to customers of future services.

Core Features
1. **Visual Dashboard and language** (See "Example 1: Main Screen" below)
   a. The product must be GenZ friendly, relying on easy to read and easily decipherable design language
   b. The product will rely heavily upon visual aids to communicate information using visualizations that include but are not limited to; bar graphs, pie charts and other visualizations
   c. Visual language must be interactive, with charts, bars and numbers reacting/changing/updating to inputs and queries put in by users (IE How do life expenses increase over time) and test environments (IE How could I afford for housing in San Francisco with "X" income)

2. **Categorization/Organization** (See "Example 1: Main Screen" below)
   a. Users should be able to group their queries into common categories such as:
      i. Finance
      ii. Education
      iii. Family
      iv. Friends
      v. Weekend Activities / Vacation
   b. Categories must be reflected into the visual language mentioned above with graphical aids that are interactive to inputs/outputs in the demo scenario (See test scenarios listed below)
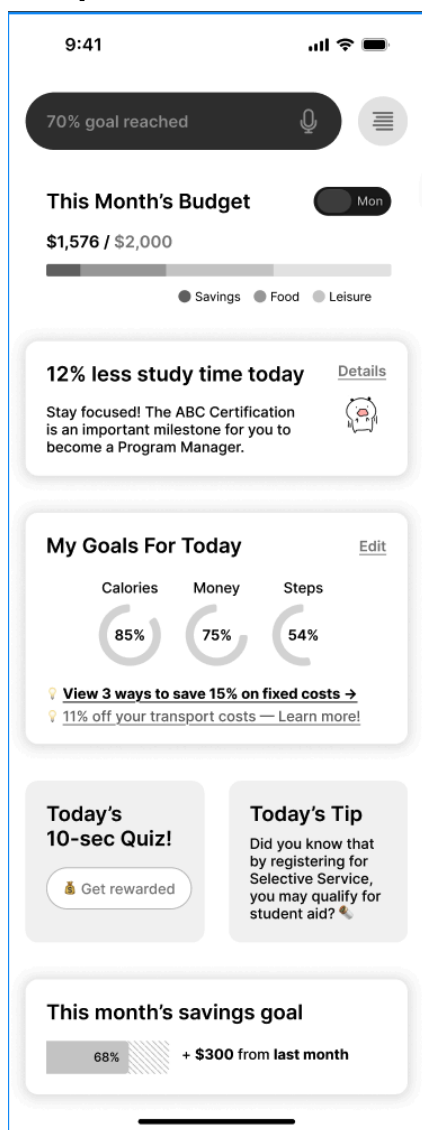
3. **AI-Powered Chatbot Assistant** (See "Example 2: Chatbot Interaction" below)
   a. Integrated conversational AI (Preferably using ChatGPT 5 or other comparable and compatible LLM) to answer user questions
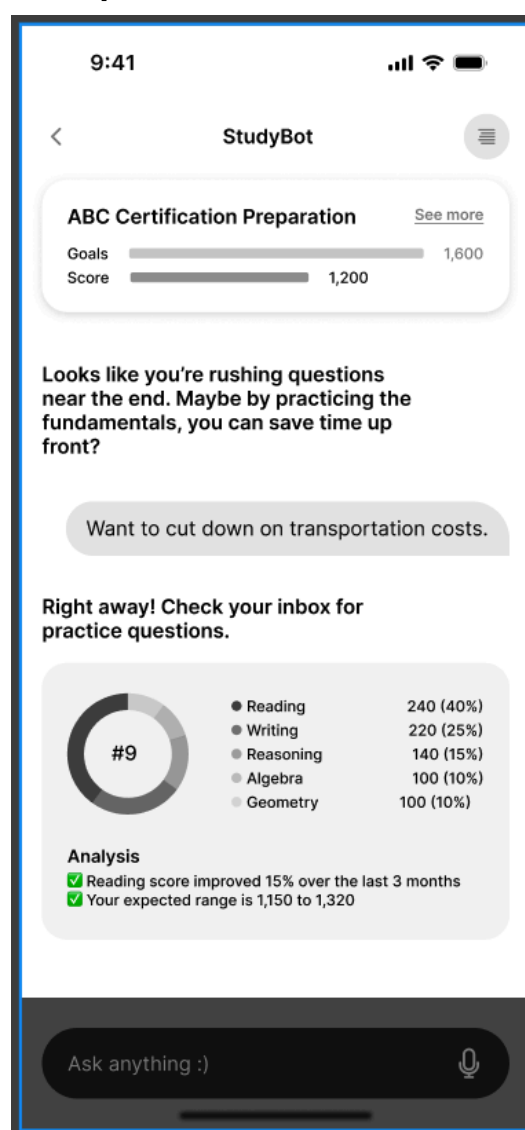
regarding their personal finance, questions regarding current events, and other questions

b. Slight to moderately optimized(pre-prompted) AI so that it is more focused on the long-term well-being of the user and to base any questions with consideration to a fabricated test-user profile (IE Bank account status, job status, etc.)

c. When prompted (either directly by the user through the chat terminal or through pre-set commands by the user) The AI will provide ways for the user to make budget conscious decisions.

Example 1: Main Screen

9:41

70% goal reached

This Month's Budget   Mon

$1,576 / $2,000

● Savings ● Food ● Leisure

12% less study time today   Details

Stay focused! The ABC Certification is an important milestone for you to become a Program Manager.

My Goals For Today   Edit

Calories   Money   Steps

85%   75%   54%

💡 **View 3 ways to save 15% on fixed costs →**
💡 **11% off your transport costs — Learn more!**

Today's 10-sec Quiz!

🛍 Get rewarded

Today's Tip

Did you know that by registering for Selective Service, you may qualify for student aid? 💰

This month's savings goal

68%   + **$300** from **last month**

Example 2: Chatbot Interaction

9:41

‹   **StudyBot**   ≡

ABC Certification Preparation   See more

Goals   1,600
Score   1,200

Looks like you're rushing questions near the end. Maybe by practicing the fundamentals, you can save time up front?

Want to cut down on transportation costs.

Right away! Check your inbox for practice questions.

#9

● Reading   240 (40%)
● Writing   220 (25%)
● Reasoning   140 (15%)
● Algebra   100 (10%)
● Geometry   100 (10%)

Analysis
✅ Reading score improved 15% over the last 3 months
✅ Your expected range is 1,150 to 1,320

Ask anything :)

PROJECT AQUA THISTLE Full Figma Link:

https://www.figma.com/design/IeEPiyMsAjNupnVT7UhVA8/PROJECT-AQUA-THISTLE?node-id=0-1&m=dev&t=9PbmzIjhw5G3tgrY-1

Closing

If at any point during the test period you have a question, please feel free to reach out to mike@hac.ai.

Thank you