# ITINER-AI Catherine Hocknell **Artificial Intelligence Certificate Course**

# Problem Space: Digital Product

How might we leverage AI technologies to generate the perfect itinerary for a new trip, taking into account different <u>locations</u>, <u>durations</u>, <u>likes</u>, and <u>dislikes</u>?

- Several itinerary-based travel apps already exist.
  - None of these allow for specific personalization.
- ChatGPT has been introduced to the Expedia app to provide recommendations during the booking process.
- New product idea:
  - Is it possible to create an app that will generate a detailed, personalized itinerary?
  - What about a bespoke image of the locations visited to keep as a memento?











# Concept:





DECIDE ON A
DESTINATION AND
DURATION



DEFINE SPECIFIC LIKES/DISLIKES/ REQUIREMENTS



GENERATE CUSTOM ITINERARY FOR EACH TRIP LOCATION



GENERATE BESPOKE IMAGE OF LOCATIONS FROM TRIP

### Tools

#### **ChatGPT**

- Market Research into existing products.
- Generates an itinerary based on a prompt with specific parameters.



#### <u>logomaster.ai</u>

Generate logo ideas to be used in the future product.

logomaster.ai

#### **Adobe Firefly**

- Generate a bespoke image to represent the overall trip.
- Experiment with a variety of image options to allow for further personalization.

#### **Canva**

- Research into ideas for a travel itinerary template.
- Create a baseline template to be populated within the app.

# Prompt Engineering

Can you help me plan two days in San Francisco? I am interested in Asian food, sports, and local history, and not interested in casinos.

#### **Instruction Prompting**

Acting as a travel agent, provide a detailed and varied itinerary of a two day trip to San Francisco? I am interested in Asian food, sports, and local history, and not interested in casinos. This should include specific recommendation examples, as well as information about each activity and how to travel between locations. I would specifically like to include a visit to Alcatraz.

requests?

#### Combination

Can you help me write a prompt that would combine the responses for the final two

#### **Role Prompting**

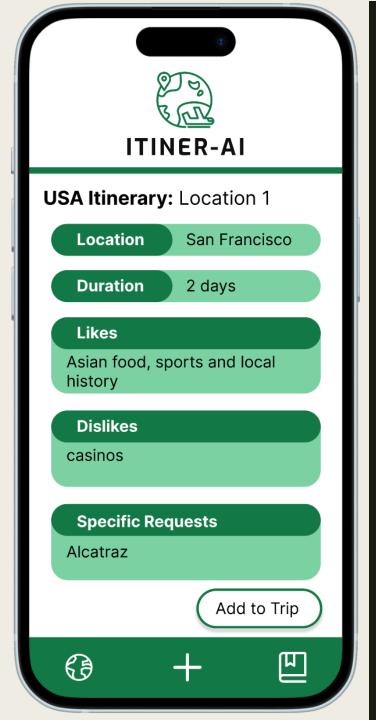
Acting as a travel agent, provide a detailed itinerary of a two day trip to San Francisco? I am interested in Asian food, sports, and local history, and not interested in casinos. Also include the duration and cost of each activity and how to travel between locations.

#### Model Feedback

This is great, but can you also include a summary of the activities you have recommended?

#### Role Prompting v 2

As the best prompt engineer in the world, can you write a prompt that will provide a similar output to the one written above, but can be re-used for different locations, durations, likes, dislikes and specific requests?



# **Final Product**

Craft an immersive and varied itinerary for a [duration] trip to [destination] that seamlessly blends [likes], and ensures [specific request]. Tailor the itinerary to accommodate these preferences while avoiding [dislikes], ensuring a captivating exploration of [destination]'s cultural facets. Provide specific recommendations for activities, attractions, dining experiences, estimated durations, approximate costs, transportation options between locations, and unique highlights at each stop. Aim for a well-rounded itinerary that caters to diverse interests, guaranteeing an unforgettable journey through the vibrant landscape of [destination].



#### **USA Road-Trip:** San Francisco

**Day 1: Asian Food Exploration and Sports** 

#### Morning

#### Breakfast at Brenda's French Soul Food:

Start your day with a hearty breakfast at Brenda's French Soul Food known for its delicious beignets and soulful dishes. Approximate Cost: \$15-\$25 per person.

#### Explore Chinatown:

Take a stroll through San Francisco's vibrant Chinatown, explore the markets, shops, and historic landmarks like the Dragon Gate.

#### Afternoon

#### Lunch at Yank Sing:

Enjoy a dim sum lunch at Yank Sing, offering an authentic and delicious assortment of dumplings and small dishes. Approximate Cost: \$20-\$30 per person.

#### Asian Art Museum:

Spend the afternoon at the Asian Art Museum, exploring its extensive collection showcasing art from various Asian cultures. Approximate Cost: \$15-\$25 for admission.

#### **Evening**

Oracle Park Visit (if in season): If there's a game, catch a baseball game at Oracle Park (home of the







# **Final Product**

- Full itinerary generated and available within the app.
- Key highlights are extracted from this to populate a Canva template for easier viewing.
- This can be saved as a pdf to be exported and used offline.





### **Final Product**

- The app also includes an Image Generation 'Scrapbook' feature to record memories from each trip.
- Generates a single image of user-specified landmarks using a generic prompt input.

A collaborative image including [content].

- Other input variables are linked to available artistic/design styles.
  - Similar to those used in Adobe Firefly.













# Go-To-Market Plan

Market Research

Beta Testing / Trial Period User Support and Feedback

Develop Generative Al tools for Text and Image generation.

Engage with Travel Community

Data Privacy and Security

Finalise flow and confirm MVP

Marketing Strategy

Monetization Strategy

Focus Group Testing

App Development

Monitor Performance & Iterate

# Challenges

- Finding a unique generative Al concept that doesn't already exist.
- Coming up with a generic prompt that will be populated with the user inputs and still provide unique responses.
- Image generation can censor certain words out of context (i.e. Space Needle)

# Highlights

- Seeing how Prompt Engineering changes the quality of outputs from the different AI tools.
- Trying out more creative AI tools, such as Canva and Adobe Firefly.
- Learning what is involved in taking a new product to the market.
- Using Figma to put together an initial prototype.

# Reflection

Where were generative AI tools specifically helpful? Where were they not so helpful?

Did using generative AI change the way you would approach these problems regularly? Or how you came up with ideas?

Were there any limitations?

Were there any ethical problems?

- Generative AI was helpful in the areas with minimal previous knowledge. For example:
  - Developing a Go-To-Market plan.
  - Market Research of similar products.
- Useful to use AI to come up with unique name ideas for a specific product.
- Limitations:
  - Accessibility of free image-generation tools
    - Limit to the number of free generations permitted per month.
  - Newer attractions are not available due to the 'memory' of ChatGPT3.5.
- Some ethical considerations to be taken into account regarding data privacy, ownership, and transparency with the user.

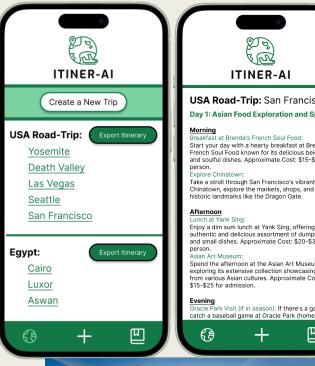
# THANK YOU

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# APPENDIX

# References

- Expedia partners with ChatGPT <u>link</u>
- Generative Al tool options <u>link</u>
- Marketing and design Al tools <u>link</u>
- Logo generators <u>link</u>







# Full Itinerary Example



Day 1: Asian Food Exploration and Sports

Morning

Breakfast at Brenda's French Soul Food: Start your day with a hearty breakfast at Brenda's French Soul Food known for its delicious beignets and soulful dishes. Approximate Cost: \$15-\$25 per person.

Explore Chinatown: Take a stroll through San Francisco's vibrant Chinatown, explore the markets, shops, and historic landmarks like the Dragon Gate.

Afternoon

Lunch at Yank Sing: Enjoy a dim sum lunch at Yank Sing, offering an authentic and delicious assortment of dumplings and small dishes. Approximate Cost: \$20-\$30 per person.

Asian Art Museum: Spend the afternoon at the Asian Art Museum, exploring its extensive collection showcasing art from various Asian cultures. Approximate Cost: \$15-\$25 for admission.

Evening

Oracle Park Visit (if in season): If there's a game, catch a baseball game at Oracle Park (home of the San Francisco Giants) to experience the city's sporting culture. Approximate Cost: Varies based on the game.

Dinner at House of Nanking: Enjoy dinner at House of Nanking, a renowned Chinese restaurant known for its flavorful dishes and friendly service. Approximate Cost: \$20-\$30 per person.

Day 2: Local History and Alcatraz Visit

Morning

Breakfast at Tartine Bakery: Start your day with breakfast at Tartine Bakery, famous for its pastries and freshly baked goods. Approximate Cost: \$10-\$20 per person.

Visit Alcatraz Island: Take a ferry to Alcatraz Island. Explore the infamous prison and learn about its history through an audio tour. Book tickets in advance. Approximate Cost: \$40-\$50 for the ferry and admission. Duration: 2-3 hours.

Afternoon

Lunch at The Slanted Door: Enjoy a contemporary Vietnamese lunch at The Slanted Door, offering a menu highlighting local ingredients and traditional flavors. Approximate Cost: \$25-\$40 per person.

San Francisco Maritime National Historical Park: Explore the maritime history of San Francisco at this park, featuring historic ships and exhibits. Approximate Cost: Free admission.

Evening

Dinner at Liholiho Yacht Club: Indulge in Hawaiian-inspired cuisine at Liholiho Yacht Club, known for its inventive dishes and lively atmosphere. Approximate Cost: \$30-\$50 per person.

Embarcadero Evening Walk: Take a leisurely stroll along the Embarcadero, enjoying views of the Bay Bridge and the city skyline.