### Makena Bustos

### August 8th, 2024

### Project Seven

The scenario I will be choosing is **Option 1: Independent restaurant.**

### **Part One: Introduction**

Consider how you could use generative AI in this scenario.

1. **Describe the potential value of using a generative AI tool in addressing the problem.**

Generative AI can reduce the need for a social media team/member for their social media. Generative AI can create images for future posts for the restaurant. The organization of team members' hours of availability and hours of operation can be adjusted and an ideal calendar schedule can be generated. The additional problem of ensuring that one cook, one buser, and two wait staff can be solved by creating a prompt to take note of these requirements. In general, a lot of these problems that this restaurant has can be resolved using generative AI. By giving the AI inputs for each problem and requesting what is needed, the AI can provide solutions that can solve current challenges. Using AI can save time and money so the restaurant can prioritize other responsibilities.

1. I**dentifies the parts of the scenario that could be solved using generative AI.** 
   * **“Unpredictable availability of ingredients and their quantities, resulting in the need for a new menu every day” -** A prompt can be made, listing the availability of ingredients that is being delivered by the local supplier, “summer greens, squashes, crisp cucumbers, tomatoes, and aromatic herbs…peaches, plums, and possibly early berries…local cheeses and a bunch of fresh bread.. regular beef and chicken shares.” Amounts of each ingredient can be calculated by hand and then can use generative AI to create a meal plan for the week and to ensure there will be no shortage of ingredients.
   * **“Not enough time for social media presence”-** Have AI generate a list of images that can be potential future posts to promote the restaurant. Certain prompts can include future holidays and dishes or new dishes/returning dishes that the restaurant wishes to promote.
   * **“Staffing for catering and storefront coverage ” -** Input all hours of operation of the week and staff availability of the week, in addition to requirements of staff present at all times to determine each employee’s schedule for the week whilst ensuring they get the days that they request.
2. **Justify the use of specific generative AI tools in solving a problem.**

For this project, I’ll be using ChatGPT. I will be using this tool because I find it a popular tool that has been improved upon by multiple users. The information that it takes from each prompt outputs answers that are insightful for this project and how the same prompt can be improved to improve its response.

### **Part Two: Practical Applications**

Collaborate with a generative AI tool to write a brief introduction to AI, then reflect on the experience.

1. **Develop a prompt that results in a brief definition of artificial intelligence appropriate for the audience in your scenario.**

**Prompt:** Write a work schedule of employee's desired days off and times they are available according to the hours of operation. Consider an optimized schedule where there has to be one cook, one busser, and two waitstaff throughout hours of operation.

Note: I inserted information from the [Project Scenario Additional Details—Independent Restaurant](https://learn.snhu.edu/content/enforced/1648514-IT-215-18570.202456-1/IT%20215%20Project%20Scenario%20Additional%20Details%20-%20Independent%20Restaurant.docx?isCourseFile=true&ou=1648514), to give the AI information

**AI’s response:  
Proposed Schedule**

#### **Monday**

* **Breakfast (7:00 a.m. – 10:30 a.m.)**
  + **Cook:** Mateo Hernandez
  + **Busser:** Leila Sharma
  + **Waitstaff:** Mia Jackson, Sophie Kim
* **Lunch (11:30 a.m. – 2:30 p.m.)**
  + **Cook:** Mateo Hernandez
  + **Busser:** Maya Chen
  + **Waitstaff:** Mia Jackson, Aisha Patel
* **Dinner (5:00 p.m. – 9:00 p.m.)**
  + **Cook:** Mateo Hernandez
  + **Busser:** Leila Sharma
  + **Waitstaff:** Sophie Kim, Aisha Patel

#### **Tuesday**

* **Breakfast (7:00 a.m. – 10:30 a.m.)**
  + **Cook:** Mateo Hernandez
  + **Busser:** Leila Sharma
  + **Waitstaff:** Sophie Kim, Elijah Rodriguez
* **Lunch (11:30 a.m. – 2:30 p.m.)**
  + **Cook:** Ava Nguyen
  + **Busser:** Maya Chen
  + **Waitstaff:** Sophie Kim, Aisha Patel
* **Dinner (5:00 p.m. – 9:00 p.m.)**
  + **Cook:** Mateo Hernandez
  + **Busser:** Leila Sharma
  + **Waitstaff:** Sophie Kim, Aisha Patel

#### **Wednesday**

* **Breakfast (7:00 a.m. – 10:30 a.m.)**
  + **Cook:** Mateo Hernandez
  + **Busser:** Zachary Johnson
  + **Waitstaff:** Omar Thompson, Aisha Patel
* **Lunch (11:30 a.m. – 2:30 p.m.)**
  + **Cook:** Mateo Hernandez
  + **Busser:** Leila Sharma
  + **Waitstaff:** Mia Jackson, Sophie Kim
* **Dinner (5:00 p.m. – 9:00 p.m.)**
  + **Cook:** Mateo Hernandez
  + **Busser:** Maya Chen
  + **Waitstaff:** Omar Thompson, Aisha Patel

#### **Thursday**

* **Breakfast (7:00 a.m. – 10:30 a.m.)**
  + **Cook:** Mateo Hernandez
  + **Busser:** Zachary Johnson
  + **Waitstaff:** Sophie Kim, Elijah Rodriguez
* **Lunch (11:30 a.m. – 2:30 p.m.)**
  + **Cook:** Mateo Hernandez
  + **Busser:** Maya Chen
  + **Waitstaff:** Sophie Kim, Aisha Patel
* **Dinner (5:00 p.m. – 9:00 p.m.)**
  + **Cook:** Mateo Hernandez
  + **Busser:** Leila Sharma
  + **Waitstaff:** Sophie Kim, Aisha Patel

#### **Friday**

* **Breakfast (7:00 a.m. – 10:30 a.m.)**
  + **Cook:** Mateo Hernandez
  + **Busser:** Leila Sharma
  + **Waitstaff:** Omar Thompson, Mia Jackson
* **Lunch (11:30 a.m. – 2:30 p.m.)**
  + **Cook:** Mateo Hernandez
  + **Busser:** Maya Chen
  + **Waitstaff:** Sophie Kim, Aisha Patel
* **Dinner (5:00 p.m. – 10:00 p.m.)**
  + **Cook:** Mateo Hernandez
  + **Busser:** Leila Sharma
  + **Waitstaff:** Sophie Kim, Elijah Rodriguez

#### **Saturday**

* **Brunch (9:00 a.m. – 1:00 p.m.)**
  + **Cook:** Liam Rodriguez
  + **Busser:** Leila Sharma
  + **Waitstaff:** Omar Thompson, Aisha Patel
* **Dinner (4:00 p.m. – 10:00 p.m.)**
  + **Cook:** Liam Rodriguez
  + **Busser:** Leila Sharma
  + **Waitstaff:** Sophie Kim, Aisha Patel

#### **Sunday**

* **Brunch (9:00 a.m. – 1:00 p.m.)**
  + **Cook:** Liam Rodriguez
  + **Busser:** Leila Sharma
  + **Waitstaff:** Mia Jackson, Aisha Patel
* **Dinner (4:00 p.m. – 8:00 p.m.)**
  + **Cook:** Liam Rodriguez
  + **Busser:** Leila Sharma
  + **Waitstaff:** Sophie Kim, Elijah Rodriguez

### **Schedule Notes:**

* **Mia Jackson** leaves at 3:00 p.m. on Monday, so she is scheduled for breakfast and lunch.
* **Omar Thompson** is not scheduled on Tuesday and Thursday due to personal commitments.
* **Elijah Rodriguez** is not scheduled for the Saturday afternoon shift.
* **Liam Rodriguez** works only on Saturday and Sunday as he needs the week off to study.
* **Ava Nguyen** has a doctor's appointment on Tuesday afternoon, so she is scheduled for breakfast only.
* **Maya Chen** is unavailable for Wednesday evening, so she is scheduled for breakfast and lunch only.
* **Zachary Johnson** is not scheduled for Saturday due to a wedding.

This schedule accommodates the staff's requested days off while ensuring coverage for each shift. Please let me know if any adjustments are needed!

**Prompt:**

Create a menu with these ingredients that were delivered and will be available for the week.

"“Hey there! Got your message about Thursday’s delivery. You can expect a mix of summer greens, squashes, crisp cucumbers, tomatoes, and aromatic herbs. We’re tossing in some peaches, plums, and possibly early berries. Also, local cheeses and a bunch of fresh bread. You’ll also receive your regular beef and chicken shares. Let me know if you need anything specific. Looking forward to your creations! Cheers.”"

**AI response:**

Based on the ingredients delivered, we can create a delicious menu that highlights the fresh produce, meats, and cheeses available for the week. Here’s a proposed menu that incorporates these ingredients across breakfast, lunch, brunch, and dinner:

### **Breakfast Menu**

#### **Summer Veggie Omelette**

* **Ingredients:** Eggs, summer greens, tomatoes, local cheese, fresh herbs.
* **Description:** A fluffy omelette filled with sautéed greens, juicy tomatoes, and melted local cheese, garnished with fresh herbs.

#### **Peach & Plum Yogurt Parfait**

* **Ingredients:** Peaches, plums, yogurt, granola.
* **Description:** Creamy yogurt layered with sliced peaches and plums, topped with crunchy granola.

#### **Sourdough French Toast**

* **Ingredients:** Fresh bread, eggs, milk, berries, maple syrup.
* **Description:** Thick slices of fresh sourdough dipped in an egg-milk mixture, cooked to golden perfection, and served with berries and maple syrup.

### **Lunch Menu**

#### **Grilled Chicken & Summer Squash Salad**

* **Ingredients:** Chicken breast, summer squash, cucumbers, mixed greens, tomatoes, vinaigrette.
* **Description:** Grilled chicken served on a bed of mixed greens with sliced summer squash, cucumbers, and tomatoes, drizzled with a light vinaigrette.

#### **Tomato Basil Soup with Cheese Toast**

* **Ingredients:** Tomatoes, basil, local cheese, fresh bread.
* **Description:** A rich and creamy tomato soup infused with fresh basil, served with cheese toast made from local cheese and fresh bread.

#### **Roast Beef & Cheese Sandwich**

* **Ingredients:** Beef, local cheese, fresh bread, greens, herbs.
* **Description:** Sliced roast beef and local cheese stacked on fresh bread with a sprinkle of greens and herbs.

### **Brunch Menu**

#### **Peach & Berry Pancakes**

* **Ingredients:** Pancake batter, peaches, berries, maple syrup.
* **Description:** Fluffy pancakes studded with juicy peaches and berries, served with a drizzle of maple syrup.

#### **Herbed Frittata with Squash & Tomatoes**

* **Ingredients:** Eggs, summer squash, tomatoes, fresh herbs, local cheese.
* **Description:** A baked frittata featuring fresh squash and tomatoes, topped with local cheese and herbs.

#### **Charcuterie Board**

* **Ingredients:** Local cheeses, fresh bread, peaches, plums, cured meats.
* **Description:** A selection of local cheeses, sliced fresh bread, sweet peaches and plums, and a variety of cured meats.

### **Dinner Menu**

#### **Grilled Beef with Herb Butter**

* **Ingredients:** Beef steaks, fresh herbs, butter, tomatoes.
* **Description:** Juicy grilled beef steaks topped with homemade herb butter, served with a side of roasted tomatoes.

#### **Roast Chicken with Summer Vegetables**

* **Ingredients:** Whole chicken, summer squash, cucumbers, tomatoes, fresh herbs.
* **Description:** Herb-roasted chicken served alongside a medley of summer vegetables, including squash and tomatoes.

#### **Peach & Plum Crisp**

* **Ingredients:** Peaches, plums, oats, brown sugar, butter.
* **Description:** A warm and comforting dessert with baked peaches and plums topped with a buttery oat crumble.

### **Specials**

#### **Cheese & Herb Stuffed Chicken Breast**

* **Ingredients:** Chicken breast, local cheese, fresh herbs.
* **Description:** Chicken breast stuffed with a blend of local cheese and herbs, baked until golden and juicy.

#### **Squash & Tomato Tart**

* **Ingredients:** Fresh bread or pastry, summer squash, tomatoes, local cheese, fresh herbs.
* **Description:** A savory tart with a flaky crust, filled with layers of squash, tomatoes, and cheese, garnished with herbs.

### **Beverage Pairings**

* **Peach Iced Tea**
  + **Description:** Freshly brewed iced tea infused with peach slices.
* **Cucumber Mint Lemonade**
  + **Description:** Refreshing lemonade flavored with cucumber and mint.
* **Berry Smoothie**
  + **Description:** A blend of seasonal berries, yogurt, and a hint of honey.

This menu leverages the freshness of summer produce and offers a variety of dishes to appeal to different tastes and preferences. The focus is on seasonal ingredients, allowing the natural flavors to shine. Let me know if there's anything specific you'd like to adjust or add!

1. **Develop a prompt that results in a passage that addresses the concerns raised in the scenario.**

**Summary:** I believe that these AI Concerns aren’t something to be concerned about in terms of privacy. Common sense-wise, putting in sensitive information is unwise in any situation since AI can take prompts but they would not be reflected on a specific individual. An example can be creating scenarios that are completely made up but can reflect on input given to the AI. Omitting sensitive information is key to avoiding privacy concerns, in this case.

**Prompt (in continuation of employee scheduling hours):**

Please omit employees' obligations from any schedules.

**AI Reponse:**

Certainly! Here's a revised schedule that focuses purely on the employees' work assignments for each day of the week, ensuring coverage of one cook, one busser, and two waitstaff for each shift without listing their personal obligations.

### **Employee Work Schedule**

#### **Monday**

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### **Summary of Assignments**

* **Cooks:**
  + Mateo Hernandez covers most weekday shifts.
  + Ava Nguyen covers Tuesday lunch.
  + Liam Rodriguez covers the weekend shifts.
* **Bussers:**
  + Leila Sharma covers most shifts, providing flexibility for other bussers' absences.
  + Maya Chen covers lunch shifts primarily.
  + Zachary Johnson is scheduled on Wednesday breakfast.
* **Waitstaff:**
  + Aisha Patel is scheduled for the majority of shifts, providing consistent coverage.
  + Sophie Kim covers various shifts throughout the week.
  + Elijah Rodriguez assists during specific breakfast and dinner shifts.
  + Mia Jackson provides coverage for breakfasts and early lunches.
  + Omar Thompson is scheduled for selected breakfast shifts and brunch on Saturday.

This schedule ensures that each shift is adequately staffed while respecting the time off and availability of the employees. Let me know if there are any further adjustments or details you’d like to include!

1. **Reflect on the writing you’ve created in collaboration with AI.**

I believe ChatGPT does a great job in taking in information and giving relatively accurate information and goes by what the prompt is given, that is if specific enough. There are some improvements where employees can have time off and still have requirements of members in service at all times, as sometimes seem to go past normal shift hours. Some employees can be scheduled for the whole hours of operations and that is a flaw and violation of the Department of Labor. With that, further prompts need to specify keeping in track of employees’ hours and ensure that they don’t go over 60 hours per week.

### **Part Three: Responsible AI**

1. Identify the areas of risk based on principles of responsible AI.

The current concerns of AI for the restaurant are as follows:

* Messing up orders (scaling recipes)
* Personal info of staff
* Rumors that it’s illegal to use AI-generated content online

With that, there are a couple of principles that would need to be addressed for responsible AI. Some of these principles include Privacy Protection, Human-centric design, and Accountability and explainability. The regard rumors regarding whether it’s illegal to use AI-generated content online requires education on the matter and how AI affects legal rights of ownership and licensing. AI is still new and is still being introduced and considered in law. Prompting in AI requires a certain level of practice when utilizing it for this project and the needs that the restaurant needs. Personal staff information requires being vague but detailed on certain information by not giving out personal information and being more specific towards important information. Training the AI with these prompts consistently can reduce/minimize the use of personal information. Like-wise to messing up orders, it is also needed to be detailed with prompting while also adhering to the human-centric design that is capable for humans to perform and to be beneficial of a relationship between humans and intelligent systems.

The introduction of these AI tools can be beneficial to those in the food industry. The ability to automatically create schedules and new recipes every week can help organizations focus on improving other aspects of business like customer service and quality. A lot goes into maintaining a restaurant, and a lot of business owners handle finances, business, food, and customer service. The capabilities in utilizing AI can be time-efficient and can be innovative. Producing new recipes and ideas for utilizing new ingredients can make breakthroughs in the creativity of all participants involved. All of this would be positively impactful if the learning and understanding of AI is actively performed.

**Citations**

**OpenAI. (2023). *ChatGPT* (Aug 4 version) [Large language model].** [**https://chatgpt.com/share/b992df14-2253-4086-8872-44aa4c289eeb**](https://chatgpt.com/share/b992df14-2253-4086-8872-44aa4c289eeb)