

KiMO Kitchenware for elderly living alone

Mr HUANG Xi, BA (Hons) in Product Design, Department of Design and Architecture Supervisor: Mr YU Chung Yin, Henry, Assistant Professor

Project Background

In recent years, the proportion of elderly people living alone in mainland China and Hong Kong has been gradually increasing, driven by social development and changing mindsets in the younger generation.

Also, living alone at home means they must take care of their own accommodation most of the time, including cooking. Consequently, news reports of kitchen accidents involving elderly people living alone have increased.



Research Objective

- To analyze the demographics and characteristics of people living alone in Mainland China and the Hong Kong SAR.
- To identify potential hazards faced by seniors while cooking alone.
- To compare available kitchen safety products, analyzing their preventive methods, advantages, and drawbacks.
- To determine the most frequently used kitchen utensils based on the cooking habits of the elderly..



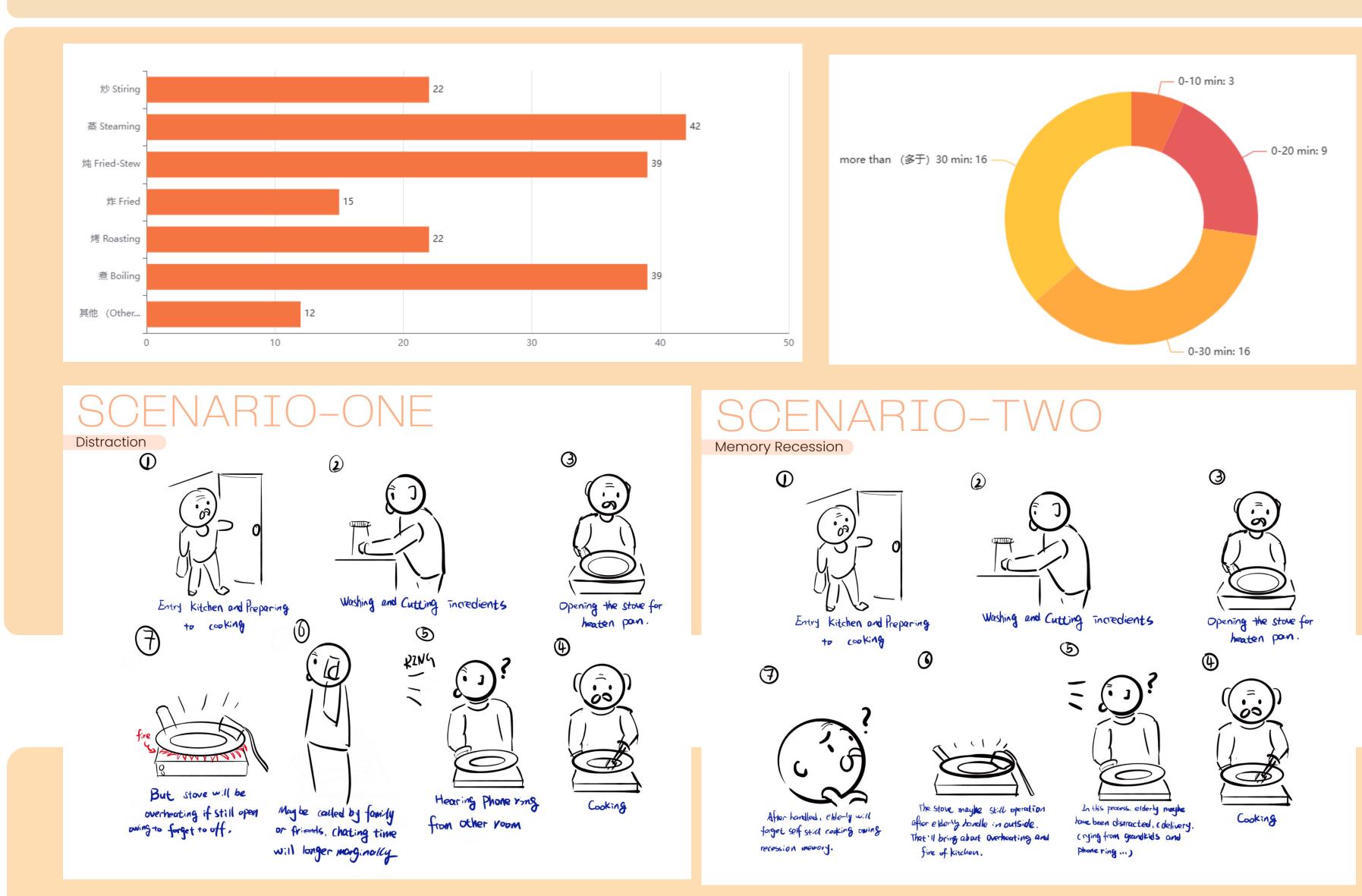
Methodology

> Questionnaire

- o Reasons of cooking independently.
- o Cooking frequency, methods, and time spent.
- O Keyword identification and user profile creation.

> Brainstorming

o Pain-point analysis, Scenario drafts & Customer journey maps.



Findings

- Forgetting food on the stove is a major safety risk for the elderly. Many older people, due to memory loss or distractions, forget they are cooking, which can lead to kitchen fires or explosions.
- Touch-operated appliances are common in modern kitchens, but they pose a significant problem. Kitchens are inherently oily and wet environments. If a user's fingers are wet or greasy, the touch interface may fail to register input. This can prevent the appliance from being operated or, more critically, from being turned off quickly in an emergency—a potentially fatal flaw.
- Distractions are another key danger factor for elderly cooks. Interruptions like a knock at the door or a phone call are common. After dealing with them, an elderly person may forget they were cooking, leaving the stove on and creating a serious fire hazard.

Conclusion

- For the elderly living alone, cooking can be easily affected by other factors. Coupled with a decline in their own memory, they are likely to forget to turn off the stove or gas during the cooking process, which can result in safety accidents.
- Most kitchen safety products on the market use visual (e.g., camera, display screen) or auditory (e.g., alarm) cues to warn of dangerous situations. However, if a user is too far from the kitchen, they may not be able to notice these alerts.
- Furthermore, in pursuit of a minimalist design, many products on the market rely solely on touch interaction. Therefore, the user may not perceive the interactive feedback.