

## Iterative Design Approach

This project was inspired by the manga 7 Seeds, famous for its complex shading, deep compositions, and attractive storytelling. Themes of resilience, teamwork, and survival matched perfectly with the educational goals of the handbook. It aimed to transform its visual aesthetics and storytelling techniques into a tool for interaction that imparts practical survival skills while maintaining a resonance with the viewer.

Feedback from 7 Seeds fans was especially beneficial in the first phases, as they knew the stylistic aspects of the manga. Their comments highlighted weaknesses in the first AI-generated pictures, particularly with character expressions and environmental features. I used tools such as DALL·E, Dashtoon, and Mage.space; even so, their outputs frequently showed a lack of cohesion and failed to conform to the ideal visual style. In response to this input, I switched to Procreate to manually edit the AI-generated illustrations, ensuring that the characters and backgrounds expressed the manga's atmospheric vibe while keeping clarity for survival scenarios.

Recognising the need for interaction, I integrated mini-games at the conclusion of each chapter. These games not only contained fundamental knowledge but also raised the handbook's attractiveness to a diverse audience, including individuals of different ages and capacities. The consistent black-and-white design guaranteed accessibility for readers with visual impairments, including colour blindness.

## Development Process

1. **AI Tools and Visual Refinement:**  
Initial attempts using DALL·E, Dashtoon, and Mage.space were useful for exploring possibilities but didn't fully meet the project's artistic vision. By returning to DALL·E, I focused on generating individual images instead of full manga pages. This approach provided greater control over composition and allowed for manual changes by using Procreate. Procreate was also instrumental in creating the book cover, chapter covers, and final illustrations, ensuring that the handbook can have the same design and follow its storytelling.
2. **Character and Background Design:**  
Characters were designed to be expressive and consistent across chapters, with attention to body language and clothing that reflected survival themes. Detailed natural backgrounds were created to complement the survival scenarios and enhance the handbook's visual storytelling. Feedback from fans helped refine these elements, ensuring they captured the emotional tone and stylistic details of 7 Seeds.
3. **Mini-Game Development:**  
To add interactivity, I experimented with different AI-assisted tools:
  1. **JigsawPlanet:** For creating survival-themed jigsaw puzzles that reinforce visual learning.

2. **Puzzel.org:** For crosswords, word searches, and spinners, testing readers' knowledge of survival terminology.
  3. **Wordwall:** For matching games and time-based quizzes that linked tools and techniques to their uses.
  4. **Educaplay:** For scenario-based "yes or no" games where readers evaluated survival strategies.  
The mini-games were carefully tailored to each chapter's content and were made accessible through QR codes.
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4. **QR Code Integration:**  
Python was used to generate custom QR codes for each chapter, linking readers to specific mini-games or puzzles. This integration bridged the handbook's static content with interactive elements, providing an engaging and seamless learning experience.

## **Ethical Considerations**

Several ethical dilemmas showed up during the project:

1. **Copyright and Originality:** I avoided directly duplicating 7 Seeds or any other copyrighted materials by using open-access AI techniques and creating creative compositions. All images were delicately developed to ensure they were influenced by, but not clones of, existing work. This approach demonstrated how AI can augment, rather than replace, human creativity.
2. **Bias in AI Outputs:** AI-generated illustrations sometimes showed stereotyped conceptions. I solved this through improving prompts and analysing results, creating flexibility in designs.

## **Research**

Detailed research was important in developing the project, guaranteeing that the survival strategies and scenarios shown were accurate, functional, and attractive. I explored several resources to learn how to survive in specific conditions, navigate effectively, and how to react to environmental threats. This included both academic books and practical instructions, in combination with online resources. I additionally referenced survival books, such as the SAS Survival Handbook by John 'Lofty' Wiseman, which offered instruction on basic survival skills such as finding water, making shelters, and providing first aid. On the other hand, I expanded different countries cultures to find the best signs that can be made in the wild, for example, the way how Japanese people traditionally use stop alerts, such as stop stones covered with rope - tomeishi.

## **Reflection on Challenges and Lessons Learned**

Apart from project achievements, the idea had difficulties. Developing consistency in AI-generated imagery needed additional correction by hand. Creating mini-games that were both simple and educational required iterative testing to guarantee that they met with the survival principles presented in each chapter. These challenges showed the importance of critically engaging with suggestions and the significance of balancing creative ambitions with practical limitations.

It also improved my awareness of the relationship between technology, creativity, and research. It illustrated how AI might function as a collaborative instrument to improve, rather than replace, human creativity. Through a combination of detailed research and creative aspects of design, I developed a resource that is equally informative and interactive, bringing in several different audiences.