SDEV2004 - Development Reflection Document

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Overview of the Design Process

For this part of the project, I was tasked with developing the Wild Atlantic Way website that showcases the natural attractions along the route while addressing the distinct needs of two personas: Philip, who values clear structure and safety, and Freja, who seeks flexibility and ecofriendly experiences. I began by researching the site's identity and defining the design direction for both user groups. I then created wireframes that mapped out the navigation and content, refining them to balance guided structure with organic exploration. I developed two visual themes: one for Philip using navy blue, deep grey, gold, and soft white to convey trust and authority, and one for Freja using forest green, soft cream, sky blue, and sand beige to reflect natural tones and Scandinavian minimalism. The site was built using HTML, CSS, Bootstrap, Flask, and Jinja2, incorporating session-based language switching and translation wrappers to support internationalisation and localisation. User testing further guided refinements to ensure a secure, intuitive, and culturally appropriate travel experience.

Development Process and Iterative Improvements

For the development process, I began by creating initial prototypes based on our research and wireframes, focusing on key features and cultural elements that catered to both personas. I then iterated on these designs through frequent testing and feedback, adjusting the layout, visual theme, and functionality to ensure the site was both intuitive and culturally resonant. Each iteration involved refining navigation elements, enhancing interactive components like maps and review carousels, and optimizing for responsiveness across devices. This cycle of prototyping, testing, and refinement allowed me to progressively improve the user experience, ensuring that the website not only met the project's requirements but also delivered a secure, engaging, and tailored travel planning experience for our diverse audience.

Addressing Design Hypotheses

I approached the design by focusing on the needs of both structured and flexible users. For Philip, i included clear itineraries, step-by-step guidance, cultural etiquette, and safety advice, along with expert and verified reviews to build trust. For Freja, I focused on flexibility and local authenticity with features like customisable journey modules and visual reviews that encourage exploration. These elements were tested and improved through feedback to make sure both sets of needs were fully supported in the final design.

Internalisation Strategy

My internalisation strategy focuses on providing a tailored experience for our diverse audience by dynamically loading language-specific content and assets. I set the default language at startup using a session variable and offer a dedicated route for users to change their language preference at any time. This method ensures that all templates and assets,

including icons, images, and style sheets, are make sense and fit in their selected language. For example, Greek users have a clearly labelled burger drop-down menu that simplifies navigation, reflecting their high uncertainty avoidance and cultural preference for clear, structured interfaces, and uses culturally relevant icons such as the Pantheon image, while Danish users see icons that resonate with their local design norms. By extracting language-specific elements and embedding them dynamically with Jinja2, my approach meets internationalisation requirements and enhances user trust and satisfaction through designs that reflect each culture's values.

Localisation Implementation

To implement localisation, I wrapped all text in gettext functions and used Flask sessions to store the user's language preference. This allowed the site to dynamically load the correct translations from PO files. I extracted strings into a POT file and created PO files for each language, which I then compiled into MO files. As a result, when a user changes their language, all text and relevant visuals update automatically. For Greek users, I made sure the burger menu is explicitly labelled and supported this with an appropriate icon. For Danish users, I integrated minimalist and eco-conscious visuals. These implementations ensured that each user had a coherent, culturally relevant experience.

Lessons Learned and Future Improvements

Through this project, I learned the value of designing with cultural context in mind. I saw how important it is to reflect user values through visuals and structure, such as explicitly labelling UI elements for Greek users (burger menu) or choosing culturally appropriate icons for Danish users. I also gained a deeper understanding of how to manage localisation workflows using Flask and Babel. In future projects, I would begin cultural testing earlier in the design phase and invest more time in refining the PO file structure to streamline translation. These lessons will help me improve the quality and relevance of future web design work.