

Improve the user experience : recalling and preserving memories while listening to music

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Academic project

Abstract

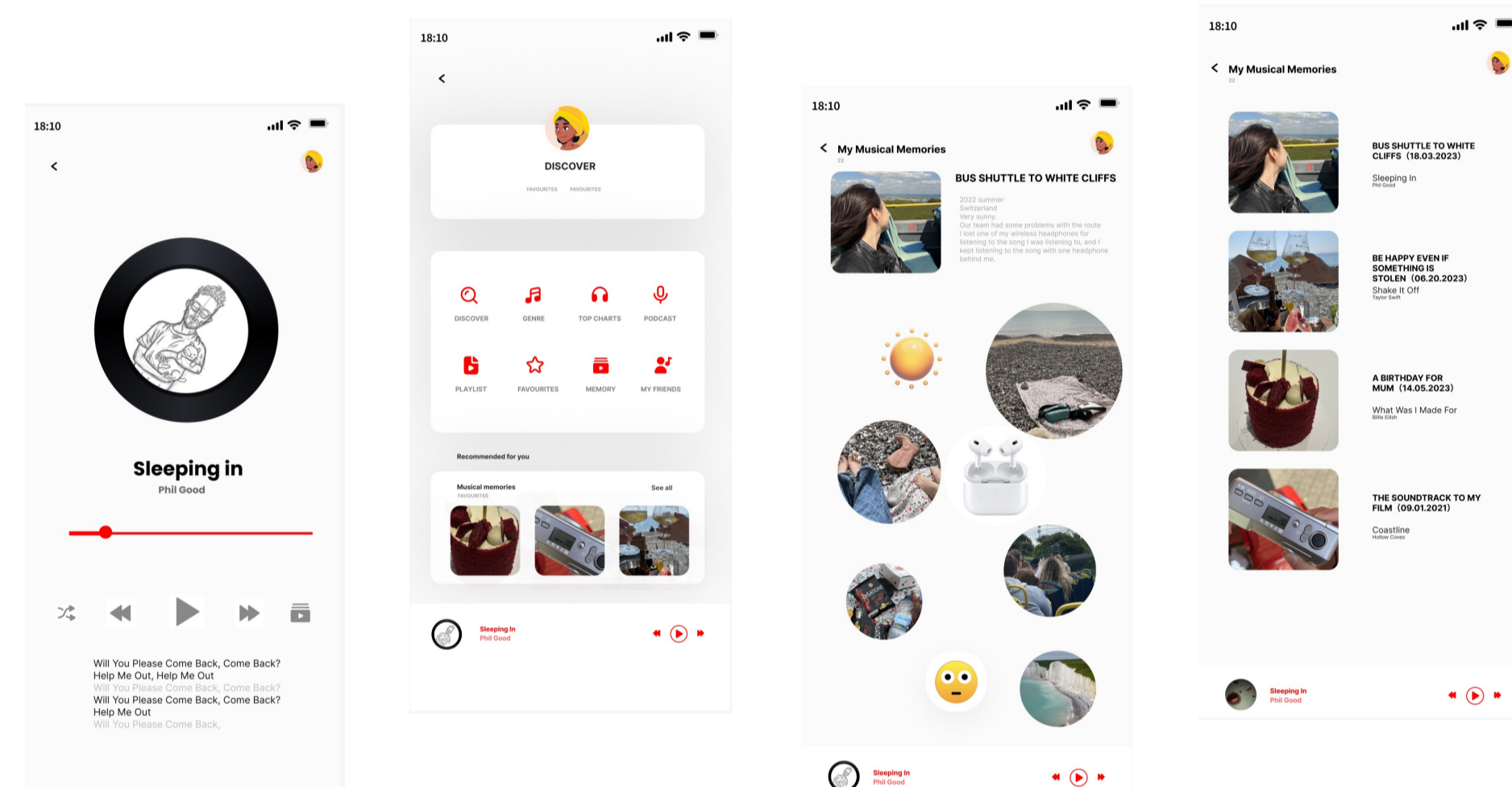
This research paper explores the interplay between music and memory, investigating how music triggers and preserves memories while enhancing music experiences. Through an interactive platform integrating emotional cues, visuals, personal photos, dynamic storyboarding, and categorization, the study examines technology's potential to stimulate and store musical memories. Findings underscore the importance of emotional cues and visuals in memory recall, demonstrating the platform's ability to enrich memory storage through personalized narratives. This research sheds light on the intricate connection between music and memory, offering innovative ways to engage with the past and emotions through music.

Introduction&Background

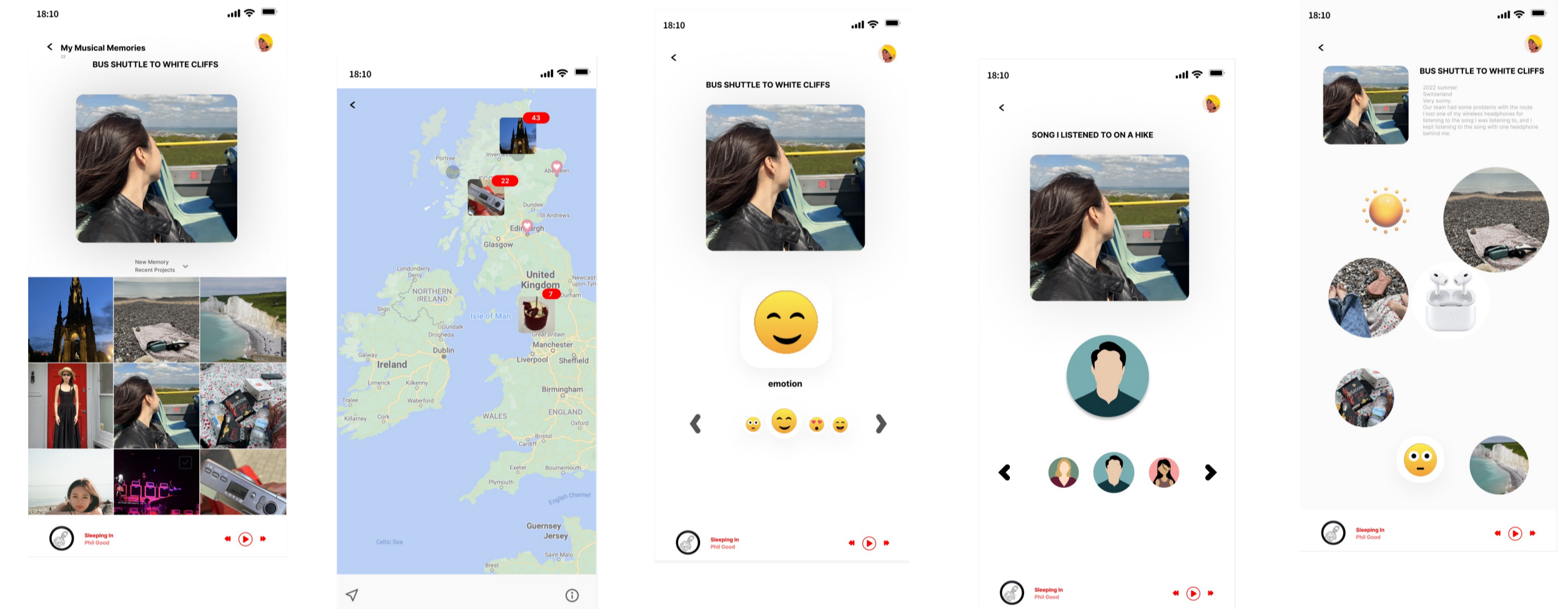
Musical melodies have always triggered memories, and music is a natural container for memories. This study aims to understand and strengthen the complex connection between music and memory. The project has two main focuses: firstly, to reveal the mechanism of music's influence in memory recall; and secondly, to design an interactive platform that seamlessly integrates music with emotional cues, visuals, personal photographs, dynamic storyboards and categorisation. The platform will serve as a canvas for users to produce vivid memory stories to the combination of memory fragments and emotional resonance. That music can trigger memories psychologically and physiologically has been confirmed by existing literature. However, this area of research remains music memory comprehensively extended methodological research. This project fills these gaps by providing a comprehensive approach to memory enhancement through interactive design.

Diagram / Design

Adding memories from the music playback page



Use the addition of personal photos, emotional cues, and storylines to lay out a storyboard of memories and tie more memories together.



Study Methodology

Interview

15 participants , random songs were played from the tester's list of favourite songs.

- 10 individuals participated in a test of personal photographs on music memory
- 5 people took part in an interview describing the process of recalling musical memories.
- Completed the sharing of listening memories and the search for memory photos

A/B Test

5 participants test different interaction pages about adding personal photos to music

- I design two low-fidelity mockups and testers use two separate ways of adding images.

Testing & Evaluation

Interview Test :

Test whether viewing memory-related photos has a positive effect on memory recovery and the narrative elements of the recall process.

Evaluation :

Personal pictures provide visual inspiration for recovering musical memories, but not all memories can be found in photographs. Testers remembered emotions and parts of the storyline from musical memories.

A/B Test Test :

Evaluate the steps of the interaction page of a mockup that matches music and personal images.

Evaluation :

Adding pictures to the music playback page is much easier, visually, combining music and pictures together to stimulate the memory.

Conclusions

This study sheds light on the complex factors and processes involved in musical memory, emphasising the role of emotion, sensory engagement and context in memory recall. The findings provide valuable insights for designing interactive pages designed to facilitate memory recall experiences. By integrating emotional resonance, multisensory engagement, and narrative elements, interactive interfaces can provide users with a more immersive and meaningful musical memory journey. However, it was not clearly concluded whether emotional guidance in music memory biases recall.

Future Work

Overlap and Categorisation of Musical Memory/Longitudinal Studies /New Technology Opportunities /Individual differences and personalisation