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BIBLIOVERSE TOK BAYU EDU: BRIDGING SOCIAL AND EMOTIONAL LEARNING THROUGH DIGITAL BIBLIOTHERAPY FOR SUSTAINABLE EDUCATION

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ABSTRACT

This BIBLIOVERSE TOK BAYU EDU is an all-in-one digital bibliotherapy platform that integrates emotional literacy, cultural wisdom, and technology for sustainable emotional learning. Aimed at educational settings and underserved communities, it supports stigma-free mental wellness aligned with SDGs 3, 4, and 10. The platform offers AI-guided mood check-ins, personalized content, and a rich Emotional Library of books, fan fiction, videos, music, podcasts, and games curated based on users' feelings. Through Bayu Academy, users explore microlearning modules on empathy, conflict resolution, emotional intelligence, and healing, earning certificates, XP, and badges along the way. It's supported by BiblioBot, a chat companion guiding journaling and reflection. Healing is gamified: players complete BiblioBot Quests, gain Emotional XP, and unlock titles like Empathy Mage or Bayu Guardian. With the Bayukit Builder, users craft their emotional survival toolkit, blending journaling, quotes, music, and reflections logged on their Achievement Board. Safe emotional expression is fostered in moderated spaces, such as the Grief Café and the Joy Zone. Ethical AI ensures content moderation, trigger warnings, and trauma-sensitive filters. Accessibility is core, featuring multilingual options, readable fonts, haptic feedback, sign language avatars, and voice-to-text tools. TOK BAYU reimagines emotional education as a right, not a privilege. By merging emotional learning with technology and storytelling, it empowers students, educators, and youth to build lifelong emotional resilience in an inclusive, future-ready ecosystem.

Keywords: Bibliotherapy, Sustainable education, Emotional literacy, Mental Wellness, Social and emotional learning

INTRODUCTION

The National Health and Morbidity Survey (2023) reports that Depressive symptoms among adults are 4.6%, and mental health problems among children aged 5 to 15 years old are 16.5%. Contributing factors include stigma, limited access to mental health resources, and so on, all of which highlight the multifaceted nature of mental health issues in the Malaysian population. The rise of mental health concerns among students and young people highlights the need for culturally sensitive, digital-first emotional support. Traditional methods often lack engagement or accessibility, especially for underserved groups. Bibliotherapy, using reading as a therapeutic tool, has shown promise but remains underutilized in digital education. Despite the increasing interest in digital mental health tools, many of these face issues with user engagement, adoption, and long-term use. A key reason, as highlighted by Vial et al. (2022), is the lack of user perspectives or the limited involvement of actual users, whether those who face the mental health issue or those who are not involved in the development process. Tok Bayu EDU addresses this gap by merging bibliotherapy, cultural wisdom, and AI in a gamified, inclusive emotional learning experience.

METHODS

This project adopts the Double Diamond design model introduced by the British Design Council, which consists of four phases: Discover, Define, Develop, and Deliver. This approach was selected to ensure a user-centered, iterative development of the BiblioVerse Tok Bayu EDU platform, balancing educational psychology, digital innovation, and emotional well-being.

1. Discover Phase

The initial phase involved exploratory research to understand existing gaps in emotional literacy and mental health tools in education. A literature review was conducted across scholarly databases, focusing on bibliotherapy, emotional intelligence, youth mental wellness, and technology integration in therapeutic platforms. Additionally, benchmarking was performed on established wellness applications, such as Quabble, Wysa, VOS, and Finch, to analyze their interface design, gamification techniques, and accessibility features.

2. Define Phase

Key insights from the Discover phase were synthesized into emotional user personas, design goals, and content categories. The emotional content was categorized by tone (e.g., grief, joy, stress) and target audience. Informal feedback was gathered through casual interviews with students, educators, and youth workers. This provided early insight into users' emotional pain points and content preferences, including journaling, fanfiction, audio, and interactive elements.

3. Develop Phase

In this phase, initial mockups of the BiblioVerse Tok Bayu platform were created using Canva. Features such as the AI chatbot (BiblioBot), Emotional Zones, Bayu Academy, and the digital Emotional Library were designed and structured based on feedback and design principles. Small

evaluations and feedback for refinement.

4. Deliver Phase

Currently in the blueprint and prototyping phase, the Deliver phase has not yet been implemented. Still, a full visual prototype is available for conceptual presentation and review in this innovation competition. Further development and pilot testing are planned in the future.

RESULTS AND DISCUSSION

The current result of this innovation is a digital prototype of Biblioverse Tok Bayu EDU, developed using Canva and structured based on the Double Diamond design model. The prototype platform visualized how bibliotherapy, emotional literacy, and cultural storytelling can be integrated into a single, gamified learning environment tailored for students, educators, and underserved youth communities.

The platform consists of five main features: (1) Emotional Zones where users engage with content based on their feelings; (2) Bayu Academy for microlearning in empathy, conflict resolution, emotional intelligence, resilience and healing; (3) BiblioBot, an AI-powered journaling companion; (4) an Emotional Library containing books, videos, music, podcasts, and games; and (5) the Support, where users can get professional support and SOS access. These features are supported by inclusive design elements such as trauma-sensitive filters, multilingual support, dyslexia-friendly fonts, and voice navigation. Each component is designed to be gamified, culturally inclusive, and accessible to all users.

Although the project is in its early stage, informal feedback from educators, students, and youth workers has been positive. Respondents appreciated the creative use of local cultural elements, the safe emotional expression zones (e.g., Grief Café, Joy Zone), and the gamified healing journey using titles like

Empathy Mage and Bayu Guardian. Also found that the users need tools that feel warm, relatable, and non-clinical. These early observations informed several design adjustments, such as adding mood-tracking options and ensuring trauma-sensitive filters. Users also emphasized the need for platforms that normalize emotional learning without stigma, especially in school environments.

The prototype embodies the potential of integrating digital bibliotherapy into formal and informal education settings. Its alignment with SDGs 3 (Good Health and Well-being), 4 (Quality Education), and 10 (Reduced Inequalities) strengthens its value as a sustainable emotional learning innovation. While formal usability testing and data collection are planned for the next phase, the current design phase has generated valuable insights on user needs, emotional pain points, and preferred digital interventions. For now, Biblioverse Tok Bayu EDU offers a promising and innovative model for promoting inclusive, technology-enhanced emotional education and digital bibliotherapy into

sustainable education ecosystems.

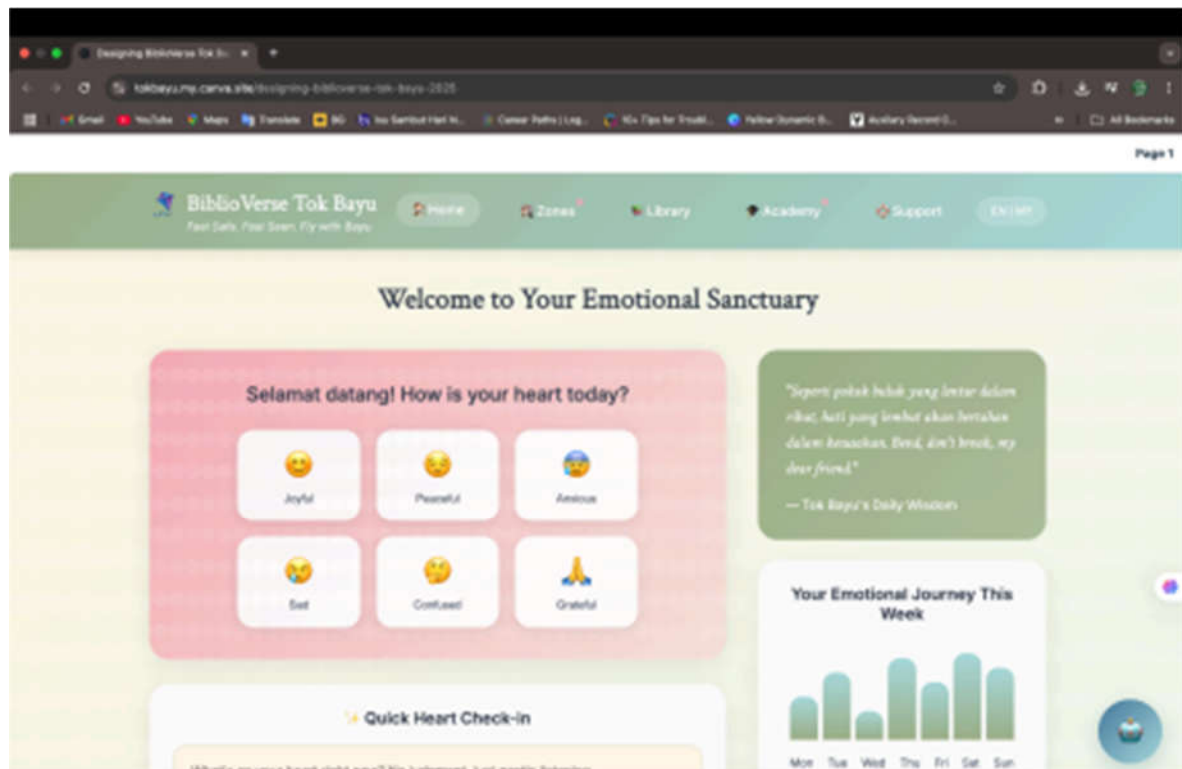


Figure 1.: BiblioVerse Tok Bayu (Website Version)

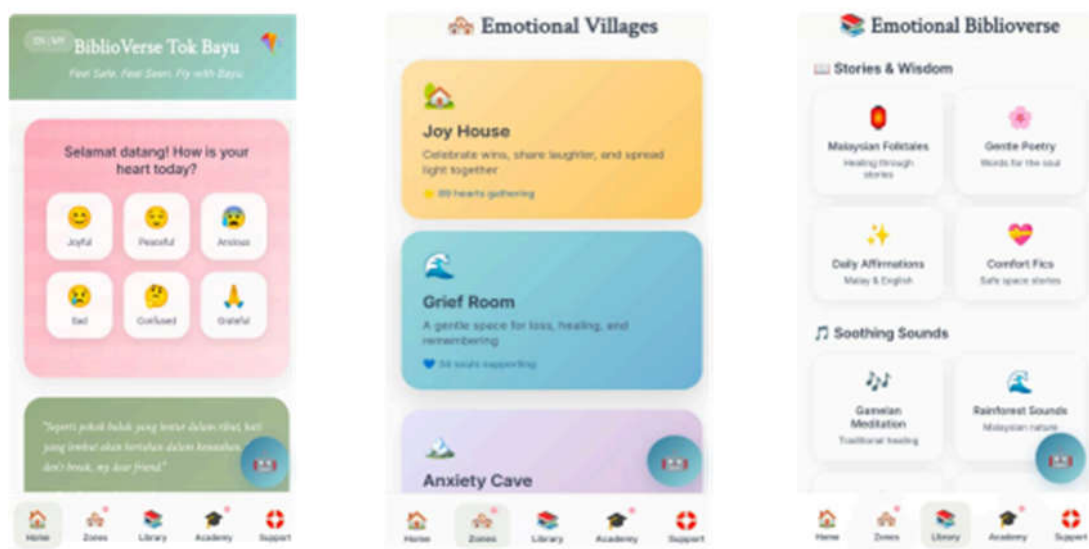




Figure 2.: Mobile Application of BiblioVerse Tok Bayu

Table 1.: Key Features of Tok Bayu and Corresponding Emotional Literacy Goals

Features	Goals
Bayu Academy	Learning & Practice
Emotional Library	Exploration
BiblioBot	Reflection & Companion
Emotional Zones	Expression & Support

CONCLUSION

Biblioverse Tok Bayu EDU represents a novel step toward culturally rooted, tech-driven emotional literacy. By framing emotional well-being as both a learning journey and a basic right, this innovation bridges digital bibliotherapy with inclusive, gamified healing. It supports SDG 3 (Good Health), SDG 4 (Quality Education), and SDG 10 (Reduced Inequalities) through a safe, human-

centered emotional ecosystem for students and communities.

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