



Integration of Ideas and Concepts Discussed in the Lectures in Project Conceptualization and Work

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Community (UN SD goal): Individual participation/Serving a context community: Members of residences in Canada

who wish to track and manage their household energy consumption to adopt sustainable

practices.

Goal(s) 7 and 11

MVP # 1, 2 and 3

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Introduction

In the context of increasing awareness about sustainability and energy conservation, this project aims to develop a comprehensive software solution that not only tracks household energy consumption but also fosters a knowledge-sharing community. The application's design and functionality are deeply influenced by several ITCs discussed in university lectures, contributing to its effectiveness and user engagement.

Integration of Ideas, Topics, or Concepts (ITCs)

Gamification Strategies Derived from Lecture:
"Supporting Learning &
Collaboration with
Gamification"

The integration of gamification strategies derived from the lecture "Supporting Learning & Collaboration with Gamification" is essential for this project. The application employs gamification techniques to enhance user involvement and to encourage quality contributions within the forum. A point-based reward system and leaderboard are implemented to incentivize meaningful participation, aiming to increase interaction and relevance to energy conservation topics. The success of these features will be measured by user-generated posts, average likes, and retention rates.

Knowledge
Management (KM) Derived from Lecture: "Data,
Information, & Knowledge
Management"

Regarding Knowledge Management (KM), principles from the lecture "Data, Information, & Knowledge Management" are applied to improve the user experience in tracking appliance energy consumption. The application will utilize an API, leveraging a government-provided dataset, to aid users in accurately logging appliance use. The effectiveness of KM in the application will be evaluated based on the reduction of entry time, increase in accuracy, and user time savings.

Rhizomatic Learning Derived from Lecture:
"Sharing Community Anchors
& Collaborative Production"

Rhizomatic Learning, drawn from the lecture "Sharing Community Anchors & Collaborative Production," is another integral aspect of the application. This approach encourages users to learn about energy efficiency and enables them to research appliances and participate in forum discussions for deeper understanding. The platform's design facilitates knowledge exchange and promotes sustainable energy practices. Metrics for evaluating Rhizomatic Learning include forum participation rates, self-reported learning outcomes, and user retention.

Potential Integration of Ideas, Topics, or Concepts (ITCs) Explored

Containing
Disinformation –
Derived from Lecture:
"Content & Dis/information
(re)Design & Strategy"

The containment of disinformation, as discussed in the lecture on "Content & Dis/information (re)Design & Strategy," is a critical issue. Our platform acknowledges the necessity to maintain the integrity of shared content to avoid misinformation that could lead users to incorrect energy-saving practices. Potential integration could involve developing algorithms for real-time fact-checking to prioritize verified information and systems that alert users to potential inaccuracies. The accuracy of the platform information and user proficiency in identifying credible sources will





	serve as metrics for success.
Change Management - Derived from Lecture: "Product Quality and Change Management"	Change Management, derived from the lecture "Product Quality and Change Management," is also paramount. Efficiently managing changes to the platform is vital for continuous improvement, user satisfaction, and alignment with dynamic sustainability practices and technological advancements. Although not yet implemented, a structured approach to change management could involve routine updates and feedback loops to adapt to new insights and user needs. The frequency of updates released in response to user feedback and overall user satisfaction will be indicators of successful change management.
Use of Tags (Metadata) - Derived from Lecture: "Sharing Community Anchors & Collaborative Production"	Use of Tags (Metadata), derived from the lecture "Sharing Community Anchors & Collaborative Production," would assist in topic discovery within the forum. Users could tag their posts for easier navigation and connectivity, enhancing the user experience by linking related posts. The implementation success of this feature will be assessed by tag usage frequency and user satisfaction.