DESIGN THINKING
IN
REDUCED INEQUALITIES

A Report Submitted to

Visvesvaraya Technological University, Belagavi

in partial fulfilment of requirements of
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of

BACHELOR OF ENGINEERING in MECHANICAL ENGINEERING

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Certificate

Certified that the seminar entitled **Application of Innovation and Design Thinking in Reduced Inequalities** is a bonafide work carried out by

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in partial fulfillment for the award of Bachelor of Engineering in Computer Science Engineering of the Visvesvaraya Technological University, Belgaum, during the year 2022– 23. It is certified that all corrections/suggestions indicated for internal assessment have been incorporated in the report deposited in the departmental library. The report has been approved as it satisfies the academic requirements in respect of the course Innovation and Design Thinking (22ME2AEIDT) prescribed for the said degree.

Signature of Guide   Signature of HOD
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Signature of Principal

Semester End Examination

Name of the Examiners   Signature with Date

1.
2.

Declaration

I hereby declare that the report entitled **Application of Innovation and Design Thinking in Reduced Inequalities** has been independently carried out by me at the Department of Mechanical Engineering, under the guidance of Devaraj K, Assistant Professor, Department of Mechanical Engineering, B. M. S. College of Engineering, Bengaluru, in partial fulfilment of the requirements of the degree of Bachelor of Engineering in Computer Science & Engineering of Visvesvaraya Technological University, Belagavi.

I further declare that I have not submitted this report either in part or in full to any other university for the award of any degree.

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Content

Abstract

The Community Equity Hub app is a transformative innovation designed to address reduced inequalities by fostering inclusive societies, empowering communities, and catalyzing positive change. This dynamic platform serves as a beacon of hope, providing a safe and secure space for individuals to seek guidance, share experiences, and drive awareness. With a focus on user privacy and empowerment, the app empowers users to choose whether to reveal their identity, ensuring a judgment-free environment where authentic stories can inspire and unite.

At the heart of the Community Equity Hub lies a commitment to bridging gaps and breaking down barriers. Through an array of features, including helplines for immediate support and specialized communities spanning regional to international levels, users can connect, collaborate, and collectively address challenges. The app's innovative design allows communities to not only raise funds but also drive meaningful change through community-driven initiatives.

Moreover, the app serves as a powerful tool for employment inclusivity, matching users with socially conscious job opportunities that align with their unique profiles. By connecting job seekers with employers committed to diversity, the app empowers individuals to secure meaningful employment that embraces their distinct backgrounds.

In essence, the Community Equity Hub is a testament to the potential of innovative design thinking in reducing inequalities. It embodies the principles of empathy, collaboration, and inclusivity, empowering individuals to drive positive societal transformation. By providing a platform for open dialogue, raising awareness, fostering connections, and facilitating collective action, the app stands as a beacon of hope in the pursuit of a more equitable and inclusive world.

Chapter 1. Introduction.

1.1 Sustainable Development Goals (17 Goals for people, for planet, to transform our world.)

The Sustainable Development Goals urge countries to promote prosperity and protect the planet by addressing poverty, economic growth, social needs, and climate change. They emphasize the importance of education, health, social protection, job opportunities, and environmental protection. These goals also serve as a crucial framework for COVID-19 recovery.

1.1.1 The Sustainable Development Agenda.

The Sustainable Development Goals are a universal call to action for all countries to promote prosperity and protect the planet. They emphasize the need to end poverty, build economic growth, address social needs like education, health, social protection, and job opportunities, and tackle climate change and environmental protection.

The 17 goals were adopted by all UN Member States in 2015 as part of the 2030 Agenda for Sustainable Development. Progress is being made in some areas, but action to meet the goals is not yet advancing at the speed or scale required. To deliver the Goals by 2030, 2020 needs to usher in a decade of ambitious action.

Fig.1.1 *Ref.6* Goal 10: Reduced Inequalities.

Chapter 2. Reduced Inequality.

2.1 Goal 10: Reduced Inequalities.

The goal of reducing inequalities is to ensure a life of dignity for all, regardless of their background or location. Inequalities based on income, sex, age, disability, sexual orientation, race, class, ethnicity, religion, and opportunity persist globally, threatening long-term social and economic development, property reduction, and destroying people's sense of fulfillment and self-worth. This can lead to crime, disease, and environmental degradation.

2.1.1 Can we achieve equality for everyone?

It can and should be achieved to ensure a life of dignity for all. Political, economic, and social policies need to be universal and pay particular attention to the needs of disadvantaged and marginalized communities.

2.1.2 What can we do?

Within countries, it is crucial to empower and promote inclusive social and economic growth by eliminating discriminatory laws, policies, and practices.

Developing countries should be better represented in decision-making on global issues to make solutions more effective, credible, and accountable.

2.2 The Targets.

10.1 Reduced Income Inequalities.
10.2 Promote Universal Social, Economic, and Political Inclusion.
10.3 Ensure Equal Opportunities and End Discrimination.
10.4 Adopt Fiscal and Social Policies that Promote Equality.
10.5 Improved regulation of Global Financial Markets and Institutions.
10.6 Enhanced representation for Developing countries in Financial Institutions.
10.7 Responsible and Well-Managed Migration Policies.
10.8 Special and Differential Treatment for Developing Countries.
10.9 Encourage Development Assistance and Investment in the Least Developed Countries.
10.A Reduced transaction costs for migrant remittances.

2.3 Innovation Design Thinking for Goal 10.

Innovation design thinking for reduced inequality involves empathizing with marginalized communities, understanding their unique challenges, and defining specific inequalities. This process generates creative concepts, which are translated into tangible prototypes. Real-world testing provides valuable insights, driving iterative improvements.

This cycle ensures that the resulting innovation is effective and aligned with the goal of reducing inequalities and fostering a more equitable and inclusive society.
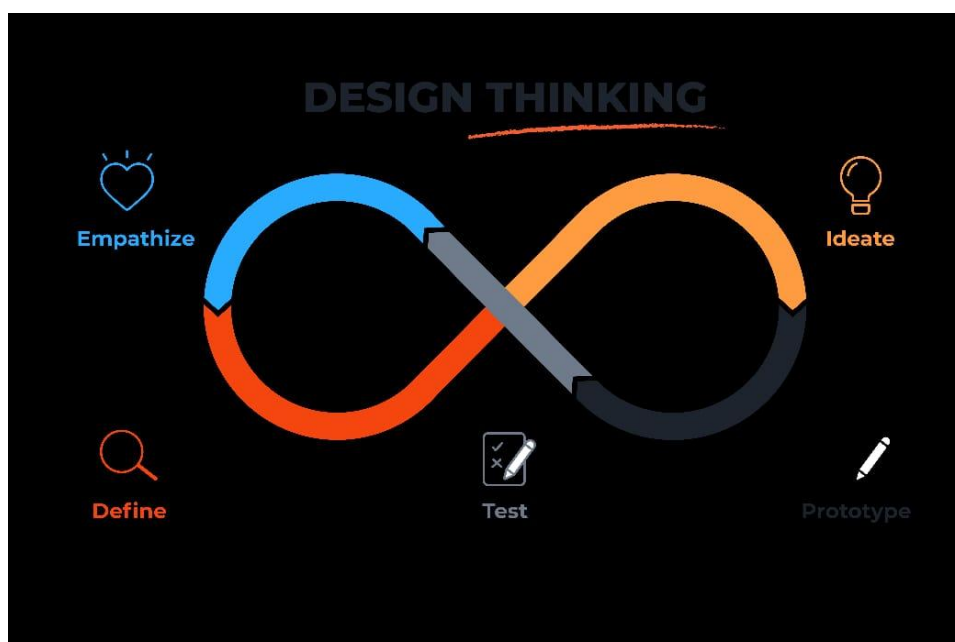

Fig.1.2 *Ref.7* Stages of Design Thinking.

Chapter 3. Community Equity Hub.

The Community Equity Hub App is a dynamic platform that promotes inclusive societies, empowered communities, and transformative organizations. It provides a secure space for individuals to connect, seek guidance, and inspire change while maintaining complete anonymity. The app ensures user privacy and encourages stories of triumph, resilience, and inspiration to resonate across boundaries. Users can drive awareness, channel their voices, and initiate dialogues that challenge and transcend inequality.

The app offers helplines for immediate support and communities can seek financial backing from like-minded funders or contributions. The app thrives on diversity, offering communities of varying scales, from international to regional, where shared experiences fuel collective problem-solving. Regional communities unite to tackle local challenges, harnessing the strength of numbers to instigate impactful change.

The Community Equity Hub is dedicated to opening doors to inclusive employment opportunities that mirror users' unique profiles, bridging the gap between skills and placements, and propelling users toward fulfilling careers that value diversity and inclusion. By pioneering a new era of reduced inequality, the app aims to uplift marginalized voices, connect global communities, and illuminate the path toward a brighter, more equitable future.

3.1 Empathise.

The empathetic phase involves conducting in-depth conversations, interviews, and surveys with marginalized individuals from diverse backgrounds and communities. This holistic approach allowed for a deeper understanding of their challenges, aspirations, and dreams. After identifying the need for a secure, anonymous space for users to seek support and share experiences without fear. The platform was created to address immediate concerns and empower users to become catalysts for change. The main purpose of the app is to maintain user privacy and achieve empowerment

3.2 Define.

With a comprehensive understanding of these challenges and insights gained from empathy, we meticulously outlined the app's objectives. The Community Equity Hub aims to address key inequalities such as lack of guidance, limited sharing of stories, barriers to inclusive employment, and insufficient resources for marginalized communities.
The app focuses on promoting gender equality, bridging educational disparities, and combating systemic discrimination. It provides a secure platform for open dialogue, fostering awareness of underrepresented voices, enabling meaningful connections, and catalyzing change through community-driven initiatives. The vision is to cultivate a cycle of empowerment, encouraging users to seek assistance and engage in reciprocal support.

Through collaborative endeavors, fundraising opportunities, and targeted advocacy, the Community Equity Hub aims to dismantle entrenched barriers and create a more equitable, just, and inclusive society.

3.3 Ideate.

A diverse team of designers, developers, social advocates, and technologists including community representatives collaboratively harnessed their creative prowess to generate innovative solutions. The app's features must include, a secure space for seeking guidance, an anonymous storytelling platform, helplines for immediate support, fundraising opportunities for communities, and specialized communities on multiple levels from regional to international.

This requires contributions from professionals in multidisciplinary fields. Generate ideas for features and functionalities that can effectively reduce inequalities, such as a digital resource center, mentorship programs, skill-sharing platforms, and more. Encourage diverse perspectives and creative thinking to explore innovative solutions. The team has to identify all the necessary approaches for the creation and functioning of the app. Explore diverse perspectives and viewpoints to encourage innovative thinking. Generate a range of potential solutions, such as technological interventions, policy changes, educational initiatives, and community empowerment programs.

3.4 Prototype.

Create a user-friendly digital platform that is accessible to users of all technological proficiency levels. Create detailed designs and user interfaces for various features, such as resource centers, mentorship portals, skill-sharing forums, and job marketplaces. Integrate responsive design principles to ensure usability across different devices. Develop a prototype of the innovation, such as a digital platform, app, social program, or policy framework, and design the user interface and experience (UI/UX) for accessibility and inclusivity. Create a visual representation or mock-up to convey the concept and functionality.

The platform should offer a safe and anonymous space for users to seek help, join communities and organizations, access guidance and support, inspire stories, helplines for immediate assistance, fundraise for diverse communities, and inclusive employment features tailored to users' profiles. The communities not only consist of users facing the same discrimination, it also allows like-minded users who want to support the cause by raising their voice.

3.5 Testing and Validating.

The app will be piloted in a targeted region with a diverse group of participants. Feedback will be collected through surveys, user interviews, and usage analytics. Alpha tests can be conducted with a small diverse group of users to gather initial feedback on usability, functionality, and overall user experience. The prototype underwent rigorous testing to ensure

user-friendliness and privacy. The prototype will be iteratively refined in design, navigation, and features based on user insights, and its impact on reducing inequalities will be measured through indicators such as increased employment rates, improved access to education and healthcare, and enhanced social connectedness.

A beta version can be launched to a larger audience for collecting data on user engagement, feedback, and technical issues, validating the app's potential to foster connections, drive awareness, and empower communities. The testing phase reinforced the app's capacity to create an impact.

The Community Equity Hub will be launched to a wider audience and monitored user engagement, data on usage patterns, and satisfaction. Constant collaboration with community members and stakeholders is crucial throughout these stages, with regular feedback loops and iterative improvements ensuring the app effectively addresses reduced inequalities and meets the specific needs of marginalized communities.

Chapter 4. Conclusion.

The Community Equity Hub app is a dynamic platform that addresses reduced inequalities through innovative design thinking. It provides a secure space for guidance, sharing stories, and driving change. The app is continuously refined and enhanced based on user feedback, aiming to foster a more inclusive, empowered, and equitable society. By revolutionizing the way we approach and reduce inequalities, one connection at a time, the app demonstrates the power of innovative design thinking.

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