

PROJECT PRESENTATION

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COMPLEX PROBLEMS

1. Plastic Waste Pollution
2. Traffic Congestion in Urban Areas
3. Mental Health Awareness and Support

1. PLASTIC WASTE POLLUTION

Empathize:

- People affected: Communities, wildlife, the environment, and future generations.
- Challenges faced: Plastic waste piles up in streets, rivers, oceans, and landfills, harming animals and contributing to pollution. People often don't have access to proper waste management or recycling facilities.

DEFINE:

Problem statement: Plastic waste is polluting the environment, affecting wildlife, and damaging ecosystems. Despite awareness, plastic use continues to increase due to convenience and lack of alternatives.

IDEATE :

Possible solutions:

- Develop biodegradable packaging alternatives.
- Educate the community on recycling practices.
- Create accessible waste management systems.
- Launch a campaign encouraging reusable products.

PROTOTYPE :

- Biodegradable packaging samples made from plant-based materials.
- Mobile app to track recycling and waste disposal.
- Publicly placed recycling bins with clear instructions.

TEST :

- Distribute biodegradable packaging in local stores and gather feedback on performance and customer interest.
- Implement the mobile app in a community, track user engagement and feedback.
- Test the effectiveness of new recycling bins in high-traffic areas.

2. TRAFFIC CONGESTION IN URBAN AREAS

Empathize:

- People affected: Commuters, businesses, public transportation users, residents.
- Challenges faced: Long travel times, stress, pollution, and loss of productivity due to overcrowded roads and unreliable public transport.

DEFINE:

Problem statement: Urban areas face severe traffic congestion, which leads to delays, increased stress, and environmental pollution. People struggle to find convenient and efficient transportation options.

IDEATE :

- Improve public transport by increasing frequency and coverage.
- Implement carpooling or ride-sharing platforms to reduce the number of vehicles.
- Design smart traffic signals to optimize traffic flow.
- Promote the use of bicycles or electric scooters.

PROTOTYPE :

- A redesigned public transportation route map with higher frequency bus or train schedules.
- Carpooling app that matches drivers with riders based on location.
- Smart traffic light system in a busy neighborhood.
- Bike-sharing stations in key areas.

TEST :

- Pilot the improved public transport routes in select districts and measure user satisfaction.
- Run a test version of the carpooling app in a neighborhood to measure car usage reduction.
- Test the smart traffic lights during peak hours and analyze traffic flow improvements.
- Launch bike-sharing stations for a month and track bike usage and feedback.

3. MENTAL HEALTH AWARENESS AND SUPPORT

Empathize:

- People affected: Students, workers, and anyone struggling with stress, anxiety, or depression.
- Challenges faced: People don't always seek help for mental health issues due to stigma, lack of access to resources, or lack of awareness about the importance of mental health.

DEFINE:

Problem statement: Mental health issues are often overlooked in society, and people don't always have the proper support systems or access to treatment, leading to a worsening of their conditions.

IDEATE :

- Launch awareness campaigns that reduce stigma around mental health.
- Offer free mental health workshops in schools and workplaces.
- Provide anonymous online counseling or support platforms.
- Integrate mental health services into general healthcare.

PROTOTYPE :

- A mental health awareness campaign with posters, social media content, and informational pamphlets.
- Online counseling platform with trained professionals available for chat or video calls.
- A mental health app that provides tips, exercises, and self-assessments.

TEST :

- Conduct surveys before and after awareness campaigns to measure changes in attitudes toward mental health.
- Test the online counseling platform in a pilot program with a small group of users and track its effectiveness.
- Monitor the app's usage and feedback, offering improvements based on user experiences.

The background features a light gray field with abstract teal geometric elements. In the top-left, there are nested rectangular outlines and a diagonal line. The top-right corner contains a 4x5 grid of small teal circles. The bottom-left has a 5x4 grid of similar circles. The bottom-right features more nested rectangular outlines and a diagonal line, mirroring the top-left design.

THANK YOU