# CleanPath: Enhancing Waste Management in the Parks of Hamilton, Ontario

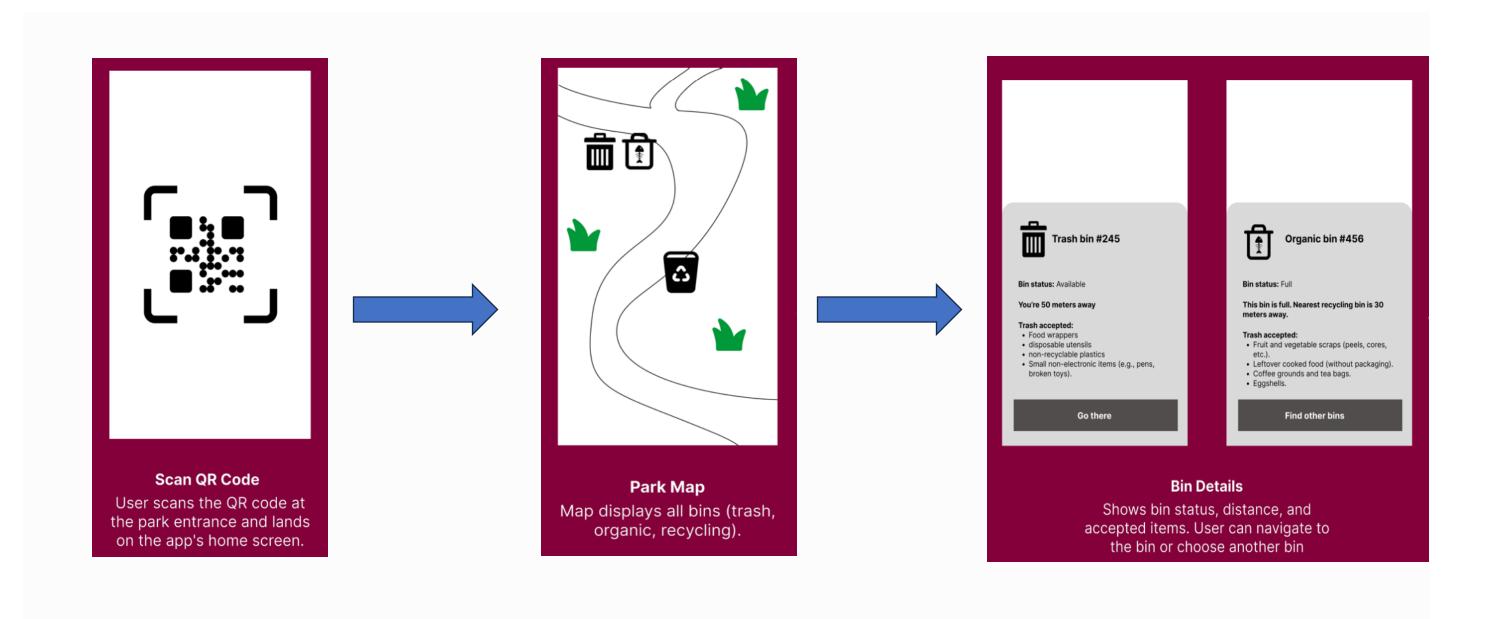


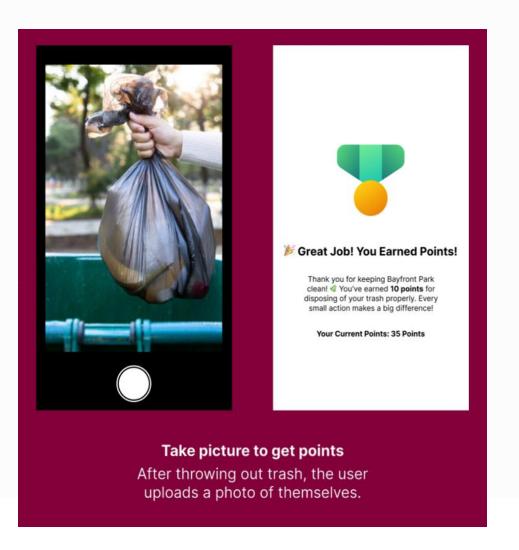
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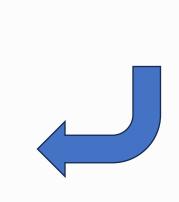
# **PROBLEM**

How might we encourage Bayfront Park visitors to practice responsible litter disposal?

Hamilton's greenspaces, particularly Bayfront Park, are facing increasing issues due to growing visitor numbers. Problems include littering, noise pollution, overcrowding, and damage to natural habitats. Despite the presence of garbage bins and signage, improper waste disposal remains a challenge, negatively impacting both local wildlife and the visitor experience. The project aims to address these issues by promoting responsible park etiquette and making waste disposal more intuitive and engaging.







#### **OUR SOLUTION**

CleanPath is an interactive and scalable waste disposal system that encourages responsible littering habits at Bayfront Park. By integrating QR code-enabled guidance, incentive-based participation, and real-time waste monitoring, this solution makes proper disposal more intuitive, engaging, and rewarding.

#### 1. Guiding Visitors to Bins with QR Codes

- QR codes placed on park signage and benches will provide real-time directions to the nearest waste bins.
- This ensures visitors can quickly and conveniently locate appropriate disposal points, reducing littering due to inconvenience.

#### 2. Incentivizing Proper Waste Disposal

- A gamified rewards system will encourage visitors to scan QR codes and dispose of waste properly.
- Small incentives, such as discounts at local businesses or park-related perks, will reinforce positive behavior.

## 3. Monitoring Bin Usage & Optimizing Placement

- Smart sensors or volunteer monitoring will help track which bins are used most frequently, preventing overflow and ensuring strategic placement.
- This data-driven approach enhances park cleanliness and improves waste management efficiency.

### 4. Community Engagement & Sustainable Growth

- The initial rollout at Bayfront Park will pilot small-scale changes to test effectiveness and visitor engagement.
- Funding through partnerships, government grants, and sponsorships will support expansion to other parks and public spaces in Hamilton.

By making responsible waste disposal accessible, rewarding, and seamlessly integrated into the park experience, CleanPath promotes sustainability, community involvement, and long-term behavioral change to protect and enhance our greenspaces.

#### **NEXT STEPS**

#### 1. Initial Implementation:

 Begin by introducing small-scale changes at Bayfront Park to enhance cleanliness and community engagement.

#### 2. Monitoring Success:

- Reduction in litter throughout the park.
- Engagement with QR code scans to assess visitor interaction and interest.

#### 3. Next Steps for Growth:

 Actively seek partnerships and funding opportunities to support the development and implementation of a points-based incentive system that encourages positive park behavior.

#### REFERENCES

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## **ACKNOWLEDGEMENTS**





