The Smart Cookie Award

Our hackathon project led us to explore many ideas, but one stood out: **Smart Stops**—a solution using geofencing and Bluetooth Low Energy (BLE) to enable wireless stop requests from either inside the bus or at the bus stop.

One persistent issue with Brampton Transit, especially during off-peak hours, is buses failing to stop, often due to poor visibility from adverse weather, low light, or simply because passengers don't want to wait in the cold. While this may seem like a niche issue, it can disrupt transit accessibility and comfort for late-night or early-morning commuters.

With **Smart Stops**, we propose setting up a geofenced area around each bus stop that activates a "request stop" feature within the app when the user is nearby. Users can then request the bus to stop without needing to step outside until it arrives, eliminating missed buses and reducing exposure to harsh weather. The integration of geofencing and BLE allows for a seamless, energy-efficient interaction between the bus and rider, making it both accessible and highly feasible.

Beyond enhancing convenience, **Smart Stops** can redefine the transit experience by providing a safe, responsive, and on-demand element to public transit. This feature isn't just about making transit more comfortable; it paves the way for smarter, more connected bus stops in the future.