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City Portal:

We chose this topic for our project because a smart city is about using technology to better impact the lives of the residents and local businesses. This topic also made us aware of the needs of a city. The technology could also help the city build a better government efficiency, sustainability, health and wellness, mobility, economic development, public safety and quality of life.

1. Executive Summary: A smart city portal can be a very useful tool for residents, visitors, businesses, as well as city officials and law enforcement. This technology can help residents find popular spots, top rated restaurants, and even allow them to make payments towards their utility/electricity bills. Visitors are also allowed to explore the city and its offerings, but are limited to certain features that the residents have. This can also be a very useful business analytic tool that businesses can use to monitor customer feedback and sales in order to be able to improve their future tactics. Additionally, through advertisements, the city can raise additional funds to help pay for upkeep of the city which will create a greater desire for people to visit. City officials and law enforcement should be granted secure access in order to be able to ensure public safety. All of these things can help a city establish better efficiency, sustainability, public health and wellness, mobility, economic development, public safety, and quality of life for its residents and visitors.

2. Project Description

- a. Context:** The motive driving this project is accessibility, safety, and promotion. Most cities nowadays do not have something like this, but people can use it as a means to be able to quickly find activities in their area, all with one central system. By purchasing this product, we will provide an application that takes a city to the next level and gives them a greater appeal to tourists and city residents alike.
- b. Goal:** This system is a way to universally connect aspects of lifestyle, safety, travel & transport, business, and health for all people within a city. Additionally, we want to provide a system in which people can access all

that a city has to offer and help businesses big and small to get their name out. With this product, citizens and tourists are able to spend more time in shops, malls and attractions thus increasing the flow of money in the city. If a person does not have to manually find multiple sources of information just to visit a location, they will be happier and by virtue of being out in a spending area longer, will spend more. This capital will go towards helping the city renovate and maintain public spaces which will increase the health and happiness of all citizens and tourists. Overall, we want to help take a city to the next level of popularity, success and happiness.

c. Requirements: This platform requires the user to be either a resident, visitor/tourist, local business/restaurant owner, or some sort of city official (which acts as a sort of admin). Residents and visitors should expect to be presented with various information on local events, restaurants, transportation, parking, and other popular spots, based on what it is they are looking to find in the city. Business owners will be able to track their customer engagement and feedback in comparison to other restaurants, which will drive competition among local businesses.

3. Approach/Solution: Our approach would be to start by building a network infrastructure and getting everyone online. After getting everyone online we need to focus our development towards an app that connects every resident with our local businesses and resources. The app would have the design close to our Mystate app with features ranging from bill payments, ride sharing, parking spot finder, neighbourhood disturbance report etc. The data that we gather from this application can provide a very valuable insight into the patterns that our residents follow, which can be used on behalf of the benefit of our residents.

4. Deliverables: The first thing that will need to be developed is a base application where users can create accounts and create business pages, event pages, or other pages that are requested. This will take about 9 weeks to create. At this point, if the client does not want any more services, the application will be ready to launch, however it will not be initially populated and there is no guarantee that the general public of the city will accept or use the application.

After the 9 weeks required to create this application, we move onto feature and page development. During this time, we create formats for different types of user requests, i.e. business pages or event pages. This will take the remaining 3 weeks to complete. Additionally, from week 10 until completion, we will begin

contacting residents and businesses to start populating the application. After the completion of the application, software maintenance will begin if the client wants it and additional formats can be added to the application if the need for them arises.

- 5. Timeline:** We anticipate to be done with development and implementation of our project in 12 weeks. Our breakdown goes: Building the network infrastructure, planning the app and using sprint to build its features, testing phase for the application and then we move onto production phase.
- 6. Cost:** We will need to take into account the cost of hiring developers to create the platform, a maintenance team, customer support, people dedicated to analytics, and cost for researching events and application population. We expect the total base cost of the application to be 250,000\$. Additionally, we offer a program of 35\$ a month for the first year in support of our applications. After the first year the price per month is subject to an increase in cost.
- 7. Intellectual Property:** We are going to file a utility patent through the United States Patent and Trademark Office which will ensure our data and core services remain with the owner of the Intellectual Property which is going to be the city government. Our Intellectual property is going to include the services we build and the tools we use to build it. We are also going to file a trademark on the logo on behalf of the city so that the app is unique and recognizable.