Smart City Model Service Result Document
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Introduction

Did creating the design help make the implementation easier?
I though creating the design document made the implementation much easier. I noticed the implementation was quicker and I felt like I had more direction while writing the code. I also saw myself making fewer last-minute changes to the design of the app after having put the design into a design document form.

How could the design have been made better, clearer, or made the implementation easier?
I think I could have spent more time on my design to use fewer classes. It would have been interesting to use a type parameter on Device rather than having children for each IoT device type. Additionally, I think the Command Processor class got out of hand with the large switch statements I used in it. I'm considering going back and refactoring the Command Processor class for when all the assignments are combined together later in the semester.

Describe the implementation changes that you made to your design and how they continue to support the requirements?
I didn't make many implementation changes. I think the biggest change was that I held off on adding the authentication token for now. I would like to see what we're doing with the Authentication assignment before I create an interface for how authentication will work in the Smart City Model Service since I would like to implement something more sophisticated than a hard-coded authentication token.

Did the design review help improve your design?
I think the design review did help! We were able to look at some of the interesting ideas our classmates came up with and that certainly helped me improve my design.

Comments about your design from your peer design review partners?
My original design put much of the functionality on the City class so my classmates had a lot of questions about that and they thought it was an interesting design. My thinking was that, since the city is associated with everything, why not let it do all the work? I later found out that persons are not attached to a city so that change my design substantially.

Comments provided by you for each of your peer design review partners?
I had some comments on Ethans design and wondered specifically why he included a "type" param in his IoT devices when the type could be implied by the fact that their class is specific to the type of IoT device. I think that might have actually convinced him to get rid of that parameter. I saw Mildred had a few redundant hash maps in her design to help with

performance and I asked about that, which helped convince myself to have redundant hash maps for Device in the Smart City Model Service and in each Devices associated City.