**SCHEMA TABLE (Road Conditions App)**

*Add rows as necessary and duplicate the feature class table if you are including multiple feature classes.*

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Feature Class: Blind Spot [Point]** | | | | | | | | |
| **Field Name** | | **Alias** | **Type** | | **Length** | **Domain** | | **Notes** |
| BlindCornerIntersection | | Is this a blind corner or intersection? | Text | | 50 | YesNo | |  |
| Cause | | What is impeding your line-of-sight? | Text | | 50 | Cause | |  |
| ControlledIntersection | | Is this a controlled intersection? | Text | | 50 | YesNo | |  |
| Snapshot | | Snapshot | Blob | | n/a |  | | Need to add disclaimer about danger of picture taking near roads. Need to make sure users understand it’s for “from the road” blind spots |
| Date | | Date | date | | dd/mm/yyyy |  | |  |
| Time | | Time | time | | hh:mm |  | |  |
| **Domain Name** | | | **Domain List** | | |
| Cause | | | Legally Parked Vehicle, Illegally Parked Vehicle, Construction, Barricade, Sharp Corner, | | |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Feature Class: Pot Hole [Point]** | | | | | | | | |
| **Field Name** | | **Alias** | **Type** | | **Length** | **Domain** | | **Notes** |
| PotHole | | Is this a pot hole? | Text | | 50 | YesNo | |  |
| Size | | What is the approximate size? | Text | | 50 | Size | |  |
| Water | | Is there a puddle? | Text | | 50 | YesNo | |  |
| snapshot | | Snapshot | blob | | n/a |  | | Need to add disclaimer about danger of picture taking near roads. Need to make sure users understand it’s for “from the road” blind spots |
| date | | Date | date | | dd/mm/yyyy |  | |  |
| time | | Time | Time | | hh:mm |  | |  |
| **Domain Name** | | | **Domain List** | | |
| Size | | | Could cause a bike flat, Could cause a motorcycle flat, Could cause a car flat, Could cause a truck flat | | |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Feature Class: Zone [Point]** | | | | | | | | |
| **Field Name** | | **Alias** | **Type** | | **Length** | **Domain** | | **Notes** |
| zone | | Is this a designated zoning area? | Text | | 50 | YesNo | |  |
| zone\_type | | What kind of zoning is this? | Text | | 50 | Zones | |  |
| snapshot | | Snapshot | blob | | n/a |  | | Need to add disclaimer about danger of picture taking near roads. Need to make sure users understand it’s for “from the road” blind spots |
| **Domain Name** | | | **Domain List** | | |
| Zones | | | Commercial, Residential, School, Special | | |

Create a geodatabase

Create feature classes and relative fields

<https://doc.arcgis.com/en/collector-classic/android/create-maps/prepare-data-desktop.htm>

<https://communityhub.esriuk.com/technicalsupport/2013/8/22/how-to-create-drop-down-menus-for-populating-attributes.html>

Create a map in arcgis online and link the geodatabase

<https://doc.arcgis.com/en/collector-classic/windows/create-maps/create-and-share-a-collector-map.htm>

share the content

### Part 6: Brief reflective essay

**Please answer the following questions:**

1. In this lab you used ArcMap, Esri Online, browser based Survey123, and Collector. As the developer, how did you find working within ArcGIS to build these data collection tools? Please include a description of the process of building the form, the geodatabase, and the online map. How easy or difficult was the process? How much time did the various steps take? This should be a ~2 paragraph narrative to reflect on the process. I encourage you to use vocabulary about design and evaluation that we've used in class and in readings.

The process involved beginning with the table template shown above. Once I realized it was rather brief, I began digging into the Survey123 portion. It initially directed me to download Survey 123 and I didn’t recognized the difference between the app and the desktop version. I downloaded both and started working on the desktop version after realizing the app version doesn’t allow for create/edit of forms. When I began working on the form it gave me regular errors about not matching the name of the list correctly to the list sheet. I was able to figure that out with some tinkering. It is considerably intuitive if you have some experience with form fill applications and building. With no experience it could be tasking.

The total elapsed time it took just on the form was about 2 hours, but that includes the download times, troubleshooting and mapping out the survey questions with the table template.

…ADD MORE ABOUT DESIGN & EVALUATION

Including something about the ability to annotate images…

1. What was something you wish you could have done with either Collector or Survey123 that you were unable to do? Elaborate.
2. Reflecting on the data collection problem you set out to solve, do you think a form-centric or map-centric approach is better for your scenario? Please elaborate and explain why, referencing differences in user experience between the two tools as necesssary.
3. Does your form introduce any risks associated with inclusion in the dataset or exclusion from the dataset? Justify your answer and explain any steps you might take to mitigate those risks.

Yes! There is a risk that users of the app could get hurt when taking pictures. I’ve included a small disclaimer about safety near the in-app location of adding pictures. However, I’m certain this needs to be improved.

### Deliverables

* Description of the data collection problem you are trying to solve (Part 1)
  + I’m trying to gather data on pot holes and blind spots for drivers.
* Data schema tables (Part 2)
  + See above
* A link to your Survey123 form (Part 3)
  + https://arcg.is/1O8fae
* The name of your Collector map (Part 5)
  + …
* Description of the customization choices you made to the basemap, popup windows, and application settings and why you made the choices you did (Part 5)
  + Ability to annotate images?
* Brief reflective essay (Part 6)
  + See above