

## Nominal Use Scenarios

CitSci.org exists to support citizen scientists in their research by providing tools and resources which allow scientists to customize their projects and scientific procedures - all in one location on the internet. Scientists, researchers, and anyone else interested in citizen science initiatives can start a project, design a datasheet, and allow volunteers to assist in data collection. Volunteers are then able to collect data themselves and enter it into the website.

Those at CitSci.org recognize that the form used by project owners to design datasheets is not as straightforward a step as they would hope. CitSci stakeholders often struggle to create successful datasheets on their own. Below, two nominal use scenarios describe the design and use of datasheets as the CitSci.org web developers intended.

**Professor Smith** - She is a Environmental Engineering professor who has funding to do research on invasive plant species in Ohio. 55 years old, married, no kids. She is very passionate about the subject and looking for high quality data. Uses the internet 4 hours a days and is very comfortable with technology.

As the owner of CitSci project “Monitoring the Invasive Plants of Ohio” Professor Smith, a primary stakeholder in the CitSci.org initiative, would like to update her project by creating a new data sheet to monitor the prevalence of Japanese Honeysuckle. She visits the site often and has created a datasheet in the past. To begin, Professor Smith clicks the shortcut to CitSci.org in her favorites bar on her browser. She then logs into her account and navigates to her project. Knowing that she wants to edit her project she quickly locates and clicks “Edit Profile” and without making changes, scrolls down to continue by clicking “Edit Project”. Once in view, Professor Smith clicks “New Datasheet” to start making her new datasheet. She is then directed to a new screen and prompted to name her datasheet and enter instructions to those she expects to make observations. She names her sheet, “Observation: Japanese Honeysuckle in Ohio” and instructs data collectors to, “Please record the following information regarding a recent observation of Japanese Honeysuckle in Ohio. Infested area by the plant should be estimated in square feet. Please include pictures of your observation. Provide any unusual observations in the comment section.” Professor Smith then clicks “Add Organism” and types in the species name, *Lonicera japonica*, *Celastrus orbiculatus*. Lucky for her, this species exists in the database, and she selects it for her datasheet. She clicks to “Add Measurement” and once the window has appeared, searches “area” under which she finds and selects “Infested Area”. She then clicks “units” to designate

“square feet” as the unit she would like to use. Next, Professor Smith would like observations to include the county in which the plant was found (there are still some counties in Ohio unaffected by Japanese Honeysuckle). To do this, she clicks “Add Site Characteristic” and in the window searches “county”. She finds the category and selects to add it to her datasheet. Feeling as though she is done with her datasheet, she scrolls to the top and clicks “save”. She is then reassured in a pop-up message her datasheet has been saved. To see her completed datasheet and verify it looks correct, Professor Smith clicks “To Project Profile” above the “save” button and is navigated to her main project screen where she can now enter data using her new datasheet.

**Kyle Hayden** - He is an 11th grade high school student. He enjoys fishing in the summer, and is interested in river quality. He wants to make a basic project to monitor fish population and see what the important factors are. He has lots of experience with technology, but could get frustrated or give up if making a project is too convoluted, since the project is mostly for fun.

Kyle, a secondary user, is interested in learning more about CitSci.org and decides he would like to venture into citizen science by contributing to a project. Having visited the site before, Kyle knew there was an open project meant for logging recent fishing trips and the fish that were caught. Having recently caught a trout on the Ogden River, Kyle decided to log his catch. To begin, he navigated to the project and toggled to the “Submit Data” tab. Seeing one datasheet “Fishing Log” he clicked “Preview” to enter his data. First, Kyle enters in the date and time when he caught his fish. He then comments that the fish