In this genius project, you will have eight days to create a technology solution to a real world problem which you will define. You are using Computer Science in this process because you have to not only remember what you've learned but you have to apply things you've learned this semester to new problems. You can evaluate ways to solve this problem and create a solution unique to your situation.

Please complete all of the shaded boxes.

Problem Definition

What problem are you working to solve?

Why is this problem relevant and real world?

How can this problem be solved with technology? What will this technology have to do?

Collaboration (optional)

Are you wanting to collaborate with others on this project? If so, why is this more than a one person job? What methods will you use to collaborate together?

Technology Tools that You're Considering Using

Time Frame

You will create this project and a Google Slideshow overview of this project *(Which can include video.)* due on Thursday, December 9th discussing your problem, how you explored ways to solve this problem, mistakes you've made, and the final solution and work. Include any recommendations for other students who may choose to participate in this project. Do you believe you can complete this task in the time allowed?

Questions

What questions do you have about this project?

Examples of Projects

Some examples of projects include:
- **Create an app**. Identify a problem and use the MIT App Inventor to create a solution for the problem. Your problem might be something like understanding AI or another new technology and conveying accurate information to a certain audience. It might

be educating people on computing and technology safety or a sport or any area of knowledge where a problem with accurate information exists.

- **Code.** Learn a new language at Code Academy and build a solution to a problem using that course. For example HTML. (Youhave already learned Google sites, in this case, they will have to use HTML directly programmed and won't necessarily just be creation of a website.)

- **Teach.** Using some examples from Hour of Code, create an "unplugged" lesson plan that we will use with elementary aged students to teach about algorithms, events, conditionals and/or repeat looks using Computational Thinking for Kindergarteners as a resource or the example with the elephant used in Kids Learning to Code: How England is pushing to Teach Coding in Schools.

- **Create or program a robotic or machine.** Invent a new way to do something in the real world. This just can't be putting together a kit but must require programming of some sort. Make Magazine has some great resources for this approach.

- Create art using Computer Science concepts - the Google CS First Art lesson has some things you can create as part of this project.

- Compose original music using digital tools such as Garage Band or other digital tools. It must be original.

- Create a Rube Goldberg machine. (Note: if you choose this option, discuss how much space you need as we will have to create a location. This will have to be a machine that you decide, receive approval for and can set up in a class period.)

- Create a personal learning plan to learn a new tool or idea and create something with it that can be used to solve a real-world need. I.e. Adobe After Effects or something you've not used before.