



CREATING SOLUTIONS FOR REAL PEOPLE THROUGH CIVIC DATA

PRESENTED BY



NATIONAL DAY OF CIVIC HACKING THE ASSIGNMENT

Civic Hacking is about collaborating with others to create, build and invent to address challenges relevant to our neighborhoods, our cities, our states and country. It's about making Big Data relevant to the lives of everyday people. The following persona and scenario provide an example of how to design a challenge that does just that.

It starts with defining a problem, understanding the needs and challenges of an individual or community. It's about taking some time to contemplate the concerns of citizens and then looking for the kinds of data that can help. .

We have found in running numerous Civic Hacking events that designing for real people and real problems can assist Civic Hackers in building solutions that resonate. It focuses the team on human needs.

The data and technology that can help address that need comes next. Civic Hackers have the skills and web literacy necessary to find the right data. The real task is for them to use their technical and design chops to then wrangle it into a form that everyday people – *the non-digerati* – find useful, usable and desirable

So, go forth and solve a problem people care about. We hope these materials help.



PERSONAL PROFILE

Median Household Income: \$17,970

In need of income support and is under the poverty line

My morning is hectic. I travel from NYC to Connecticut for my job, so every morning, I need to figure out who's going to pick up my daughter because after-school programs all close at 6:30 pm before I get back home. Her dad used to pick her but he has a new job with on-call hours. I don't know what I'll do. I have to call around to friends who I don't like taking care of my daughter. It's hard to find someone I can trust.

"That one hour in picking her up is crucial to me."

You have to do so much research to find good after-school programs and it's hard to get your kid in. The city is cutting programs, and you don't know when they're open and take applications. I had to go to the park everyday at 3pm to submit this form for my daughter to take ballet classes and I had to hound the lady every day.

"So difficult in terms of the cost of living and I always feel like I am in a catch 22 situation. I want to provide my kids a good future but it is so hard on my salary and they keep cutting the free programs in my community."



There are multiple child care and after school programs available in the city, but accessing them, affording them and fitting them into Ms. Sedgewick's hectic schedule can be difficult. Take a moment to learn about some of the challenges Ms. Sedgewick faces in finding childcare. Think about how you could tailor a solution that turns data about multiple schedules, locations, availability and program information into useful options.

NEEDS & CHALLENGES

AFTER SCHOOL

You have to do A LOT of research to find good programs that are affordable. And then you have to wait a long time and keep applying and going back to make sure your child gets in

Can't tell what's most affordable

COMMUNITY PROGRAMS

I talk to my friends to find out what the best programs are

Don't know of good programs

GOVERNMENT PROGRAMS

The city is cutting programs that take care of my daughter 'till 6. I couldn't go to work if that happened. I literally don't know what I would do without them.

Hard to find programs that fit her schedule needs

CHILDCARE

I need someone to take care of my kids until I can get home from work. So I have to find friends or family to help. It's hard to find someone I can trust.

Finding trusted service providers

LOW COST PROGRAMS

The keep cutting the free programs in our area. They're not getting funding anymore.

Limited options, funding support



MS. SEDGWICK

There are many publicly available data sources that contain information relevant to Ms. Sedgwick and the aspirations that she has for her children. Finding relevant information is the challenge. With some savvy searching and clever coding find open data resources that be turned into a valuable resource for Ms. Sedgwick. Many of these options have Open APIs for data access and discovery.

The screenshot shows the NYC Department of Education website. The main navigation bar includes 'Parents and Families', 'Students', 'Employees', and 'Community and Partners'. Below this, there are links for 'Home', 'About Common Core', 'Tasks, Units & Student Work', 'The Common Core Classroom', 'Professional Learning', 'For Families', and 'Videos'. The 'Tasks, Units & Student Work' section is active, displaying a search interface with a 'Keywords (optional)' field and a 'Grade (select at least one)' dropdown menu. The dropdown menu is open, showing options from Pre-K to 12th Grade. The main content area displays search results for 'Grade 6 Math: Ratios and Proportional Relationships' and 'Grade 6 Math: Ratio Reasoning', each with a PDF icon.

The screenshot shows the Khan Academy website. The top navigation bar includes 'LEARN', 'COACH', 'ABOUT', 'DONATE', and 'KHANACADEMY'. A search bar is present on the right. The main content area is titled 'Arithmetic and pre-algebra' and includes a description: 'The first math topic. Start here if you want to learn the basics (or just want to make sure you know these topics). After this, you should be ready for algebra. This topic includes videos from the former developmental math playlists.' Below the main title, there are several video thumbnails with titles: 'Addition and subtraction', 'Multiplication and division', 'Factors and multiples', and 'Negative numbers and absolute value'. Each video thumbnail includes a star rating and a play button icon.

The screenshot shows the GreatSchools website. The top navigation bar includes 'Find a School', 'Review Your School', 'Preschool', 'Elementary School', 'Middle School', 'High School', and 'College'. Below this, there are links for 'Hot Topics', 'Worksheets & Activities', 'Homework Help', 'Parenting Dilemmas', 'Health & Behavior', 'Learning Difficulties', and 'Successful Students'. The 'Parenting Dilemmas' dropdown menu is open, showing options like 'Bullying', 'Too Much Homework?', 'Screen Use & Abuse', 'Sex Education', 'Managing Kids' Stress', 'Teaching Character', and 'Teacher Issues'. The main content area features a search bar for 'Start here: Find a school' and a video player titled 'Growing up with bipolar disorder'.

The screenshot shows the NYC Department of Youth & Community Development website. The top navigation bar includes 'Residents', 'Business', 'Visitors', 'Government', and 'Office of the Mayor'. Below this, there are links for 'TRANSLATE', 'EMAIL A FRIEND', 'SIGN-UP', 'TEXT SIZE', and 'PRINTER FRIENDLY'. The main content area is titled 'DYCD Programs' and includes a search bar with a 'GO' button. Below the search bar, there are dropdown menus for 'Afterschool Programs', '6', and 'Bronx'. A 'Submit' button is visible. The main content area also includes a sidebar with links for 'Home', 'About DYCD', 'News & Press', 'Youth Connect', and 'Afterschool'.

Here's a Civic Hack that attempts to help. EduHack uses Ms. Sedgwick's personal data about her child's grade level, school and interests to sort out what after-school programs are available in the area that may be of interest. It also pulls up Khan Academy online lessons that map to her child's grade. This is just one example. By combining Ms. Sedgwick's personal needs with the vast array of data resources out there, we can sort through all the information and provide her with a personalized view of the resources available.

The EduHack website features a search interface with the following elements:

- Buttons: "Find After School Programs", "Maximize Learning", "Find The Best Schools"
- Form fields: "Grade: 6" and "Subject: Mathematics" with a "SEARCH" button.
- Search results list:
 - Mixed numbers and improper fractions
 - Comparing improper fractions and mixed numbers
 - Converting Mixed Numbers to Improper Fractions
 - Changing a Mixed Number to an Improper Fraction
 - Changing an Improper Fraction to a Mixed Number
 - Adding Fractions with Like Denominators
 - Subtracting Fractions
 - Finding Common Denominators

The YouTube video displays a math lesson on a blackboard:

- Text: "Add. Simplify the answer."
- Equation: $\frac{3}{15} + \frac{7}{15} = \frac{3+7}{15} = \frac{10}{15} = \frac{10 \div 5}{15 \div 5} = \frac{2}{3}$
- Visual aid: A number line with 10 equal segments. The first 3 segments are shaded red, and the next 7 segments are shaded green, illustrating the addition of the two fractions.

The GreatSchools website page for Bronx Charter School for Excellence includes:

- Header: "greatschools™ Involved parents. Successful kids." with a search bar.
- Navigation: "Find a School", "Review Your School", "Preschool", "Elementary School", "Middle School", "High School", "College".
- Location: "Home > New York > Bronx > New York City Geographic District #11".
- School Profile: "Bronx Charter School for Excellence", Charter, K-6, 439 students, "10 out of 10" rating.
- Test Scores: "New York State Assessments Results" for Grade 3, English Language Arts, 2012 score of 98% vs 2011 score of 85%.
- Advertisement: "SUCCESS ACADEMY CHARTER SCHOOLS WE NEED GREAT TEACHERS LIKE YOU Transforming education - for good. Apply Now".

The Kips Bay Boys & Girls Club website features:

- Header: "KIPS BAY BOYS & GIRLS CLUB The Positive Place for Kids" and "BE GREAT DONATE!".
- Navigation: Home, Who We Are, Club Houses, Fund Raising, Programs, News & Media, Contact Us.
- Section: "Find a Program" with filters for "Sort By" and "Program".
- Program Listing: "Throggs Neck Center Partners in Reading Throggs Neck Center" with a description: "A Board of Education sponsored tutorial reading program for first through third grade. This program takes place, Tue - Thu from 3:30 p.m. - 5:30 p.m..."
- Advertisement: "NEW YORK DESIGN" with a Yankees logo.

Community Services

	Community Services		
	General	Volunteer	Private Resources
Federal	data.gov	volunteering	findthedata.org
	Community Services	-	
NYC	community	volunteering	-
	job related	-	-
Las Vegas	general	volunteering	NonProfits
	public records		foundations yellow pages
			CommunityGuide



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