

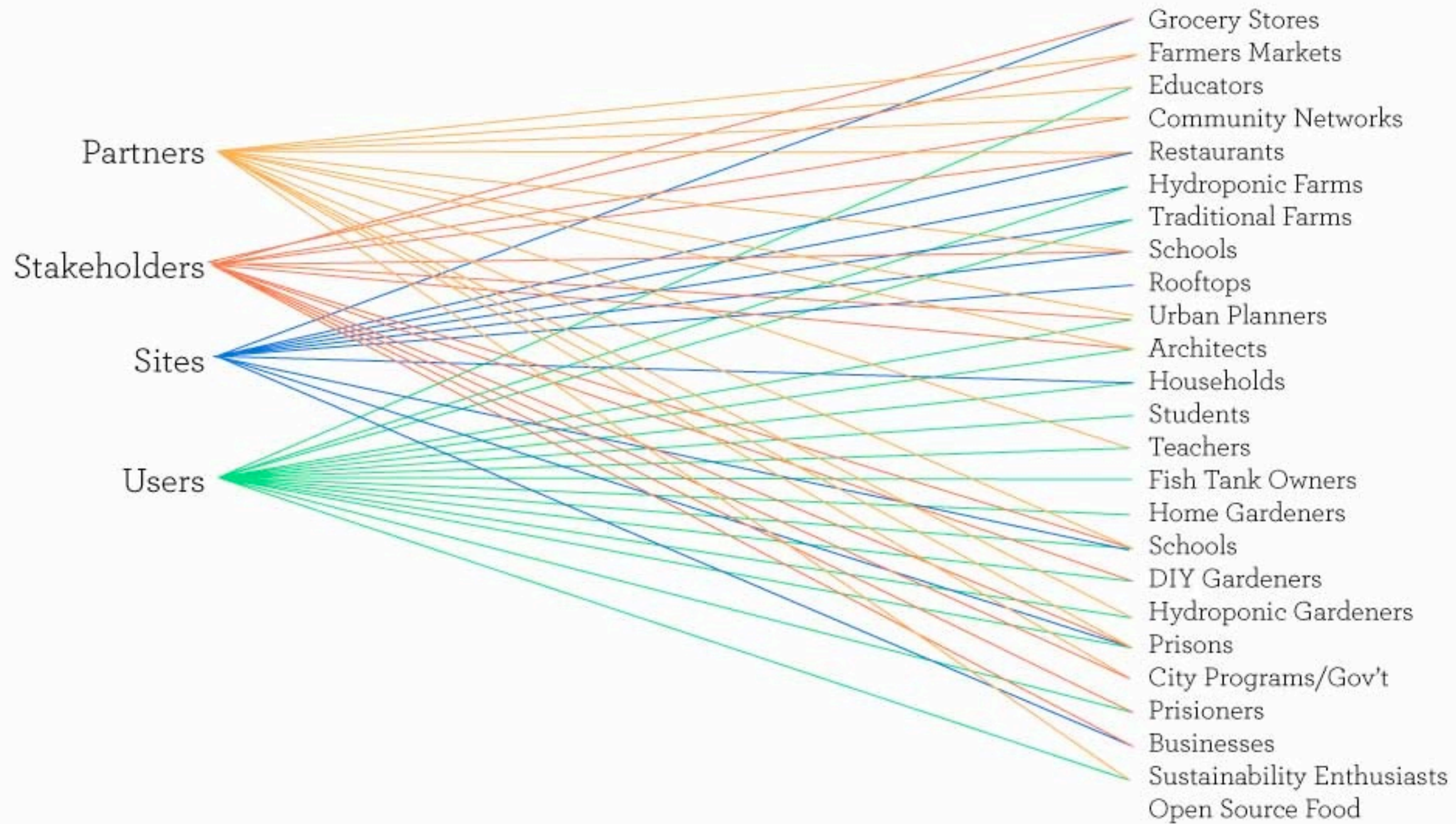
users and testing

chris piuggi

HydroNet provides a semi-autonomous data collection system for user education and support. Remote management of environmental data is vital to successful crop growth in urban contexts. By tracking and sharing the statistics associated within these ecosystems, HydroNet seeks to support research, education and innovation in the field of urban agriculture.

Goal

Create an open-source, scientific-grade, affordable data collection for individuals, communities and urban farms to allow them to share system data.



Stakeholders	Partners	Sites	Users
<div>Tier 1</div> <div>groups integral to systems application</div> <div>Community Networks</div> <div>Urban Planning Firms</div> <div>Architecture Firms</div> <div>Local Gov'ts</div>	<div>Tier 1</div> <div>groups integral to systems application</div> <div>Community Members</div> <div>Community Group Leaders</div> <div>Urban Planners</div> <div>Architects</div> <div>Gov't Officials</div>	<div>Tier 1</div> <div>locations integral to systems application</div> <div>Rooftops</div> <div>Households</div> <div>Apts</div> <div>Businesses</div>	<div>Tier 1</div> <div>people integral to systems application</div> <div>Apt Buildings</div> <div>Families</div> <div>Communités</div> <div>Individuals</div>
<div>Tier 2</div> <div>education about system and technology</div> <div>Schools</div> <div>Prisons</div>	<div>Tier 2</div> <div>education about system and technology</div> <div>Teachers</div> <div>Administrators</div> <div>Wardens</div>	<div>Tier 2</div> <div>education about system and technology</div> <div>Schools</div> <div>Classrooms</div> <div>Prisons</div> <div>Universities</div> <div>Hacker spaces</div> <div>Workshops</div>	<div>Tier 2</div> <div>educators & learners</div> <div>Students</div> <div>Teachers</div> <div>Prisoners</div> <div>biologists</div> <div>bloggers</div>
<div>Tier 3</div> <div>doers, makers and sharers</div> <div>Gardening Communities</div> <div>DIY Communities</div> <div>Fish Keeping Communities</div> <div>Hydro Farms/Farmers</div> <div>Urban Agriculture B2C</div> <div>Technology Communities</div>	<div>Tier 3</div> <div>doers, makers, shakers, eaters & talkers</div> <div>Food & Tech bloggers</div> <div>Rooftop co-ops</div> <div>Engineers</div> <div>Hobbyist communities</div>	<div>Tier 3</div> <div>Platforms for sharing</div> <div>Blogs</div> <div>Message Boards</div> <div>Youtube</div> <div>Instructables</div> <div>Newspapers</div>	<div>Tier 3</div> <div>growers, eaters, & sharers</div> <div>Gardening Communities</div> <div>DIY Communities</div> <div>Fish Keeping Communities</div> <div>Sustainability Enthusiasts</div> <div>Foodies</div> <div>Hobbyists</div> <div>Technology Communities</div>
<div>Tier 4</div> <div>distribution infrastructure</div> <div>Grocery Stores</div> <div>Farmers Markets</div> <div>Restaurants</div>	<div>Tier 4</div> <div>consumer business decision makers</div> <div>Food buyers</div> <div>Market Organizers</div> <div>Market Sellers</div> <div>Chefs</div> <div>Restaurant Owners</div>	<div>Tier 4</div> <div>distribution sites</div> <div>Farmers Markets</div> <div>Grocery Stores</div> <div>Restaurants</div> <div>Grocery Delivery</div>	<div>Tier 4</div> <div>distribution members</div> <div>Farmers</div> <div>Restaurants</div> <div>Grocery Stores</div> <div>Co-ops</div> <div>Bodegas</div>

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doers, makers
and sharers

- Gardening Communities
- DIY Communities
- Fish Keeping Communities
- Hydro Farms/Farmers
- Urban Agriculture B2C
- Technology Communities

Partners

Tier 3
doers, makers,
shakers, eaters
& talkers

- Food & Tech bloggers
- Rooftop co-ops
- Engineers
- Hobbyist communities

Sites

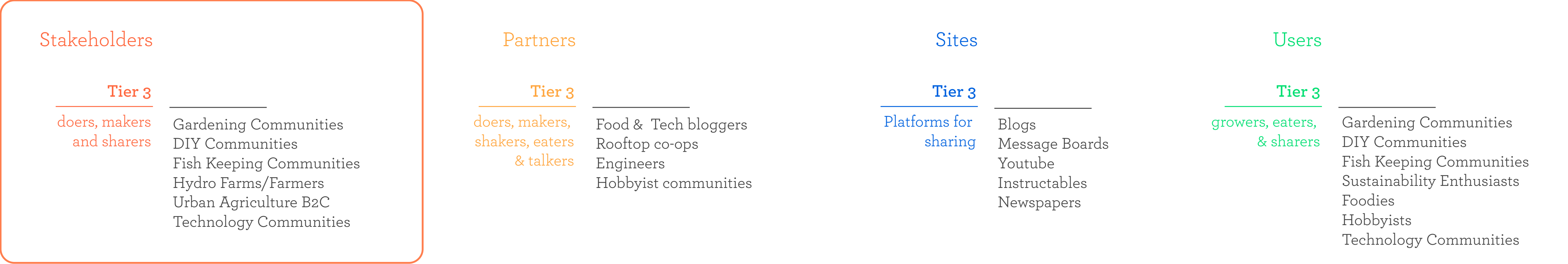
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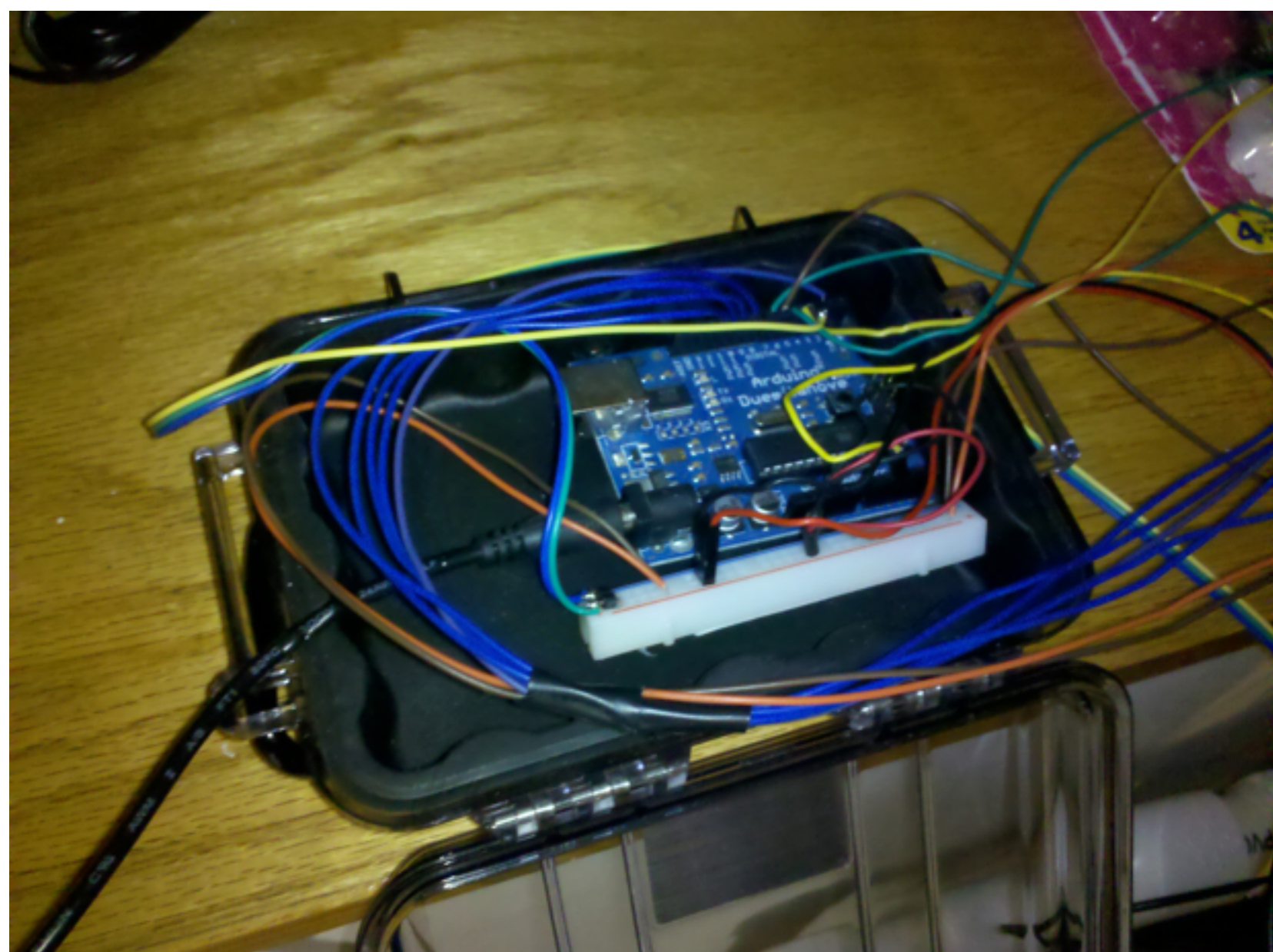
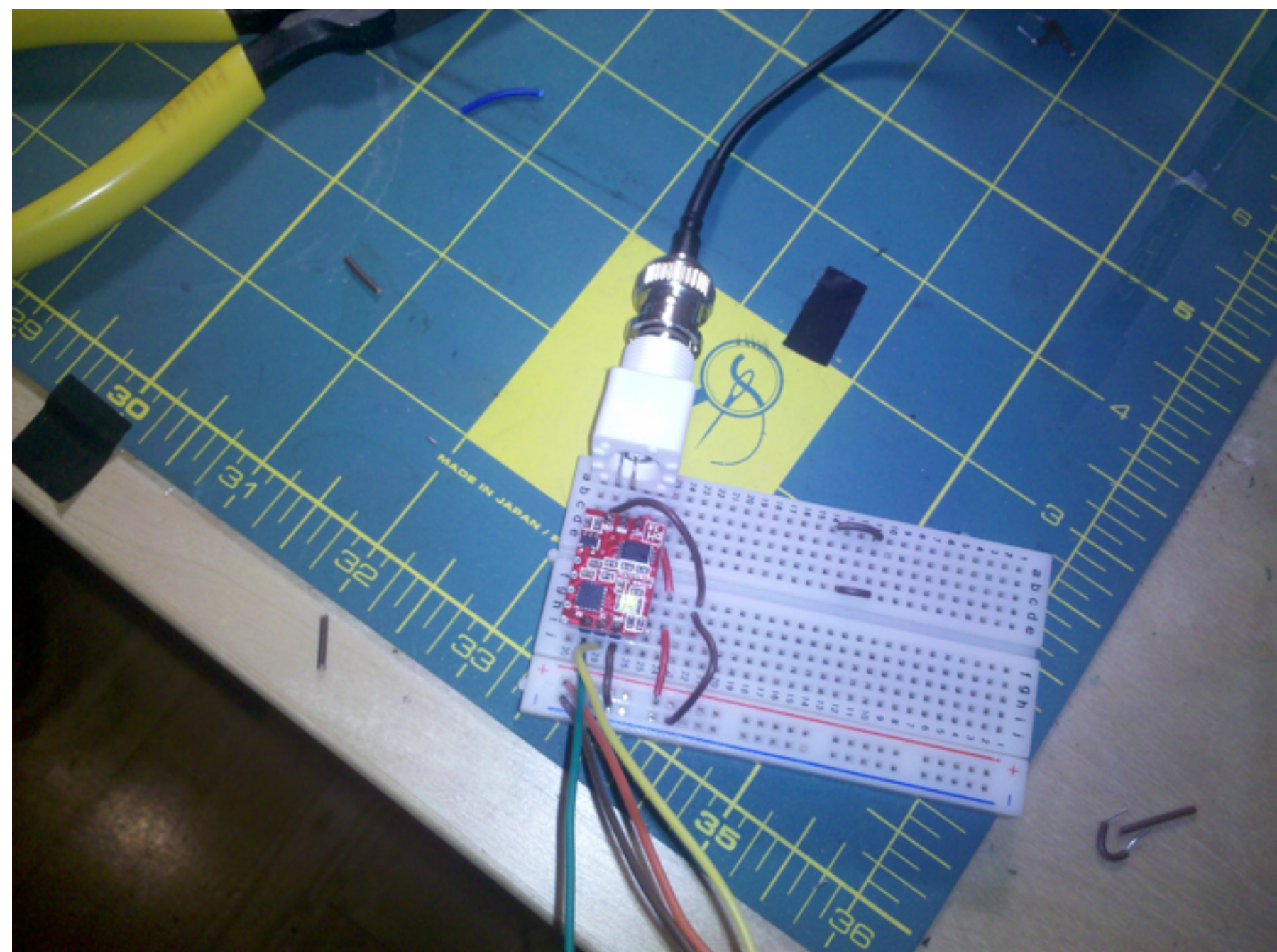
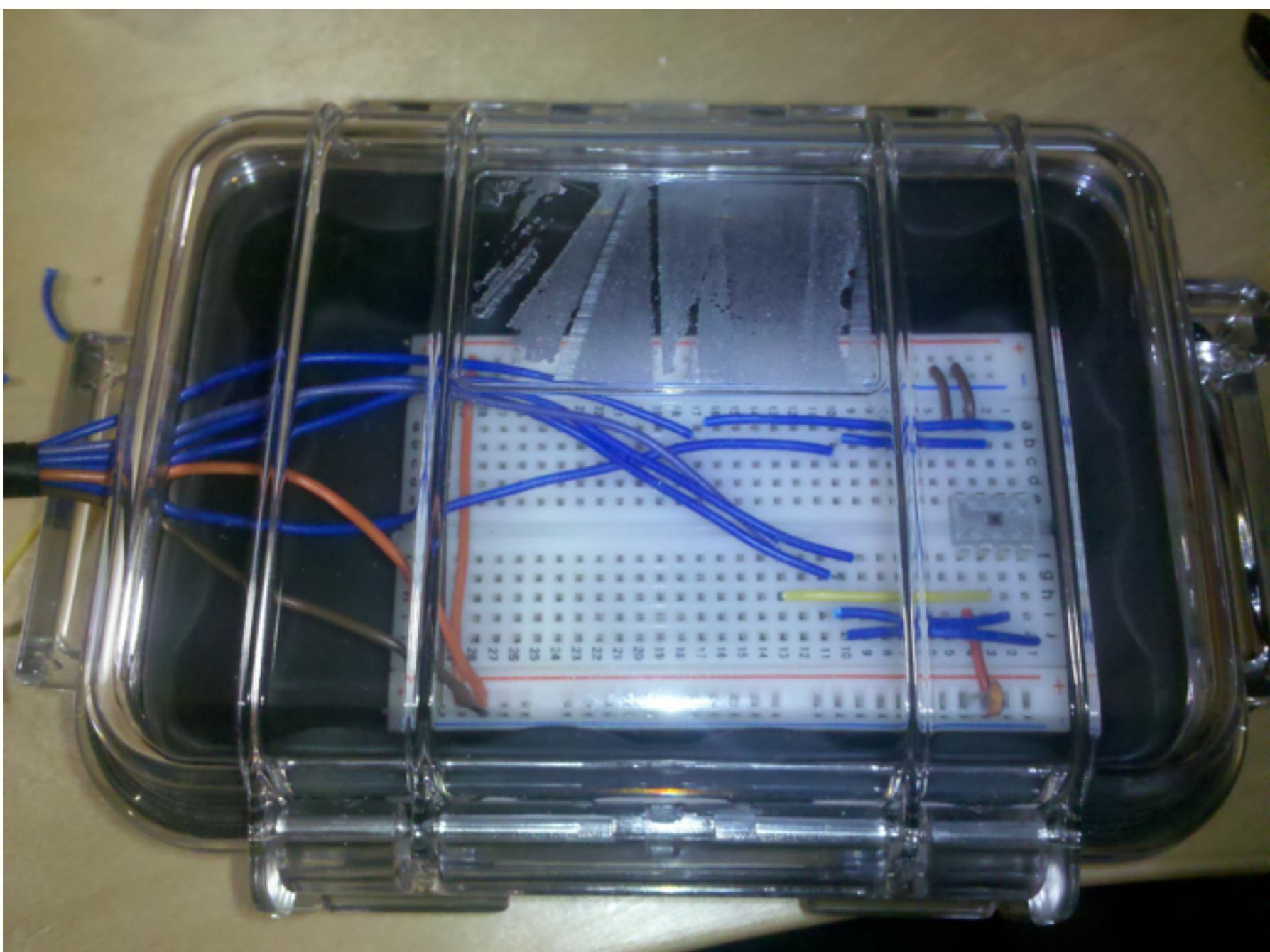
Tier 3

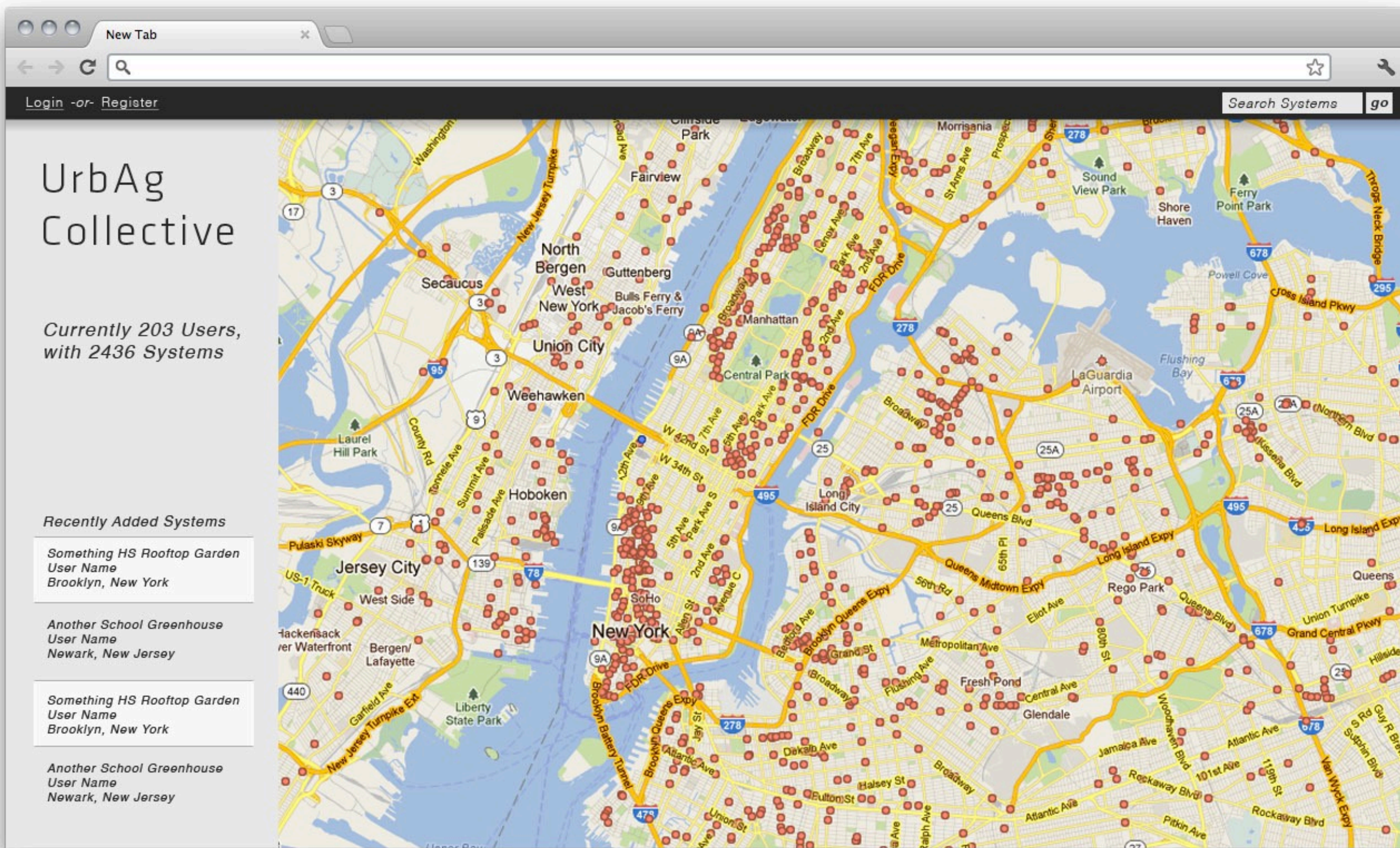
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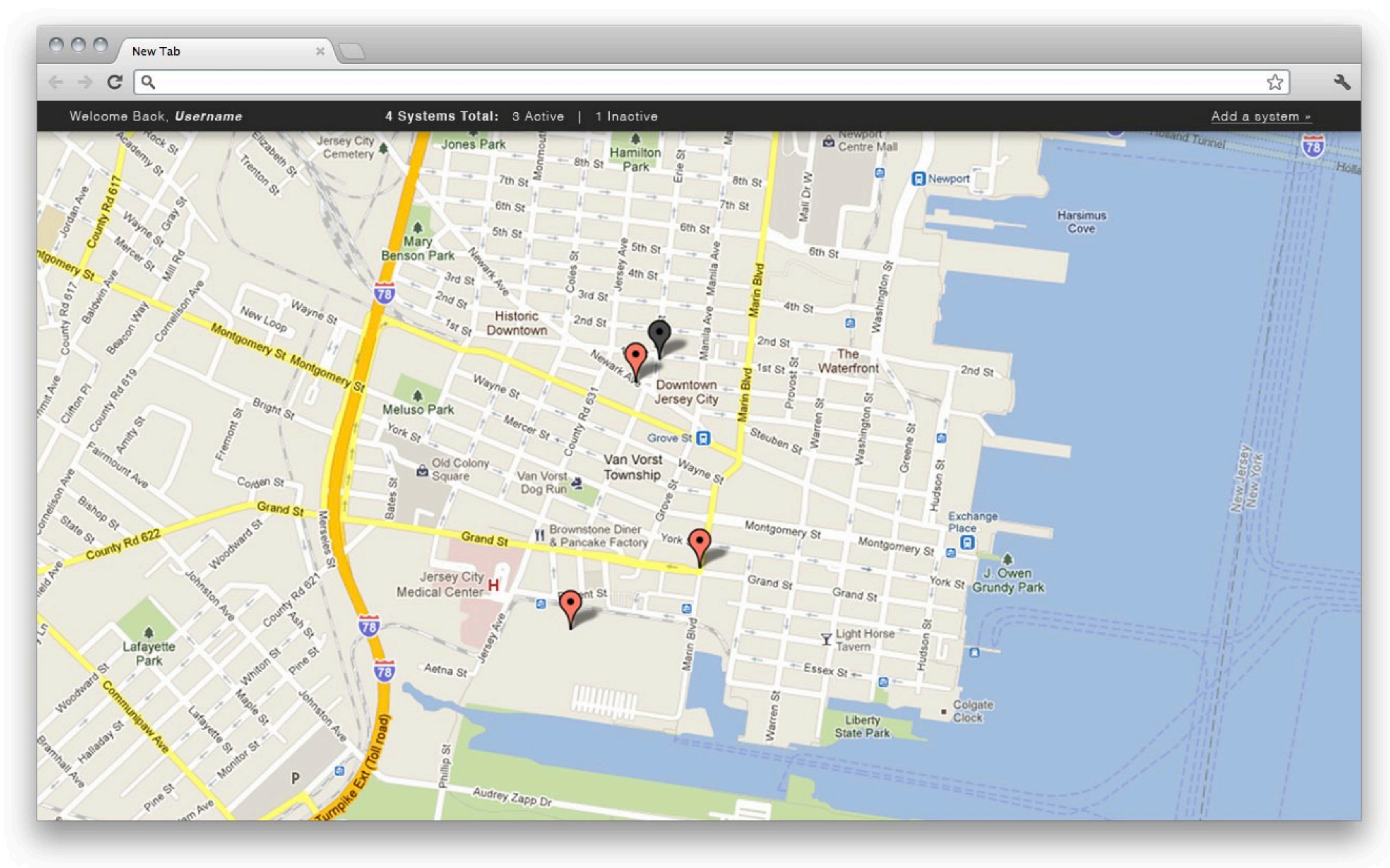
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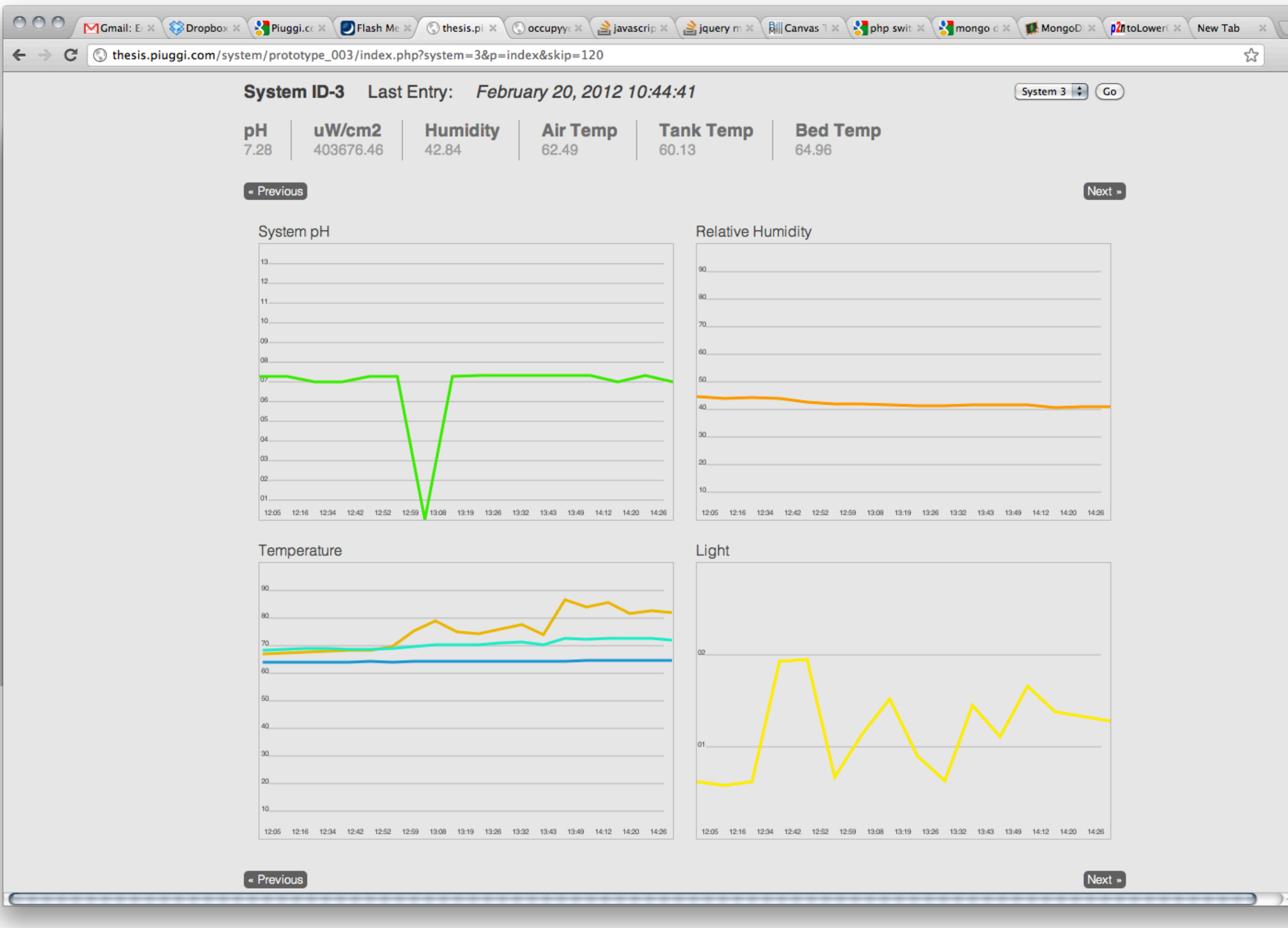












Sensors

Partition pH Meter for multiple probes -- NPN Transistors

Dissolved Oxygen not as important as EC & pH

Specular analysis for Ammonia & Nitrogen cheap

Interface

See whole day - no need for any less time

Scale out to month or year

Value range setting/ guides

- by value

-by plant

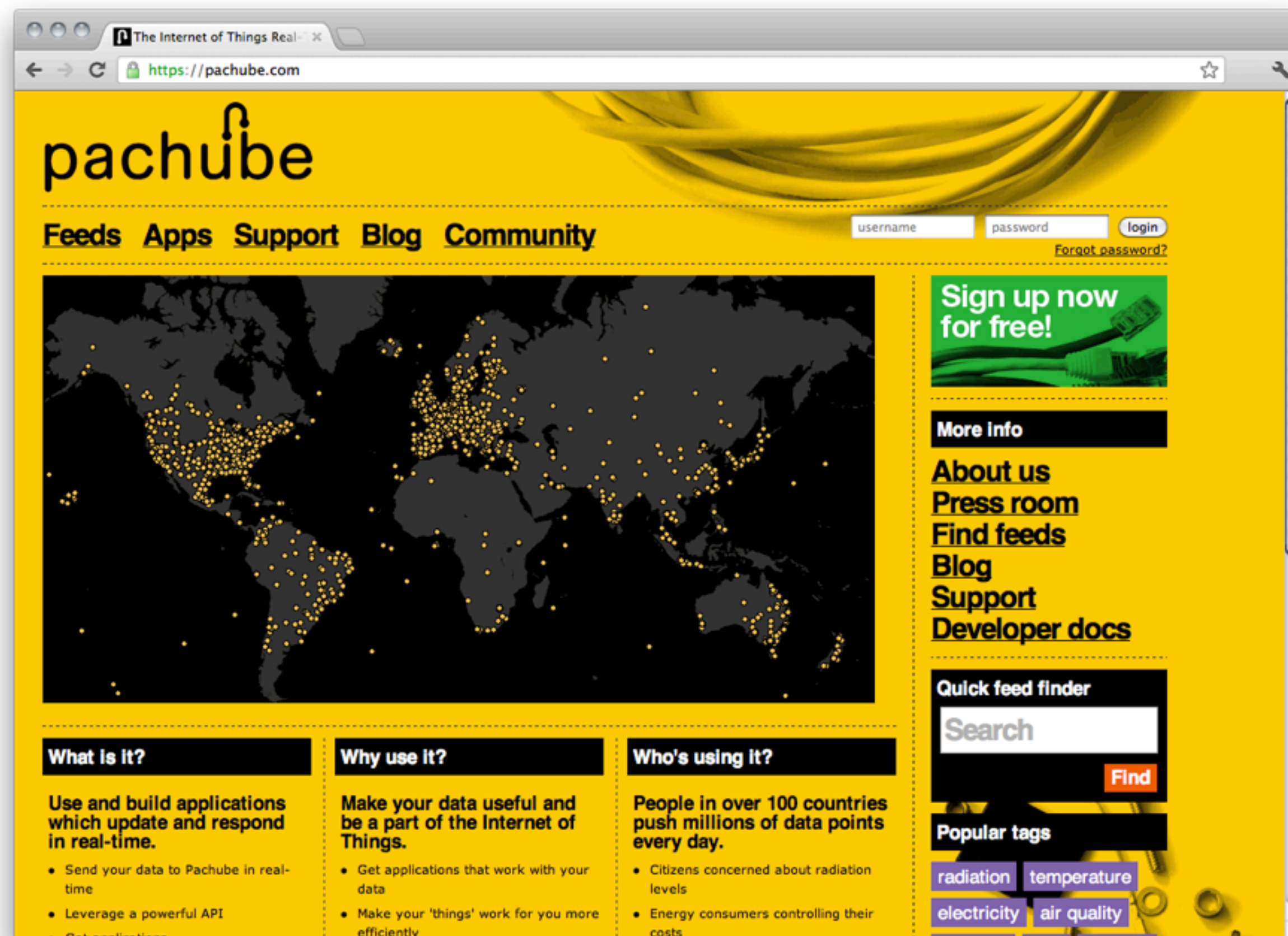
Time frame comparisons

- month to month

- week to week

- day to day

- system to system



Windowfarms™