InnovationLab
Further your understanding of disaster risk

Code for Resilience

Bridging communities for disaster resilience

Code for Resilience (CfR), a multi-year global initiative that works with wide-ranging global partners from the public, private, community, and civic tech sector, aims to build communities' resilience to natural disasters through innovative uses of information and communication technologies (ICTs).

Through a series of virtual and in-person activities, CfR fosters collaboration around the development of relationships, ideas, and tools (both software and hardware) in improving community resilience. CfR focuses on the ability to identify risk, reduce the risks from, and respond to major natural disasters.

Code for Resilience 2015

2015 CfR activities focus on the CfR Fellowship and Mentoring Program, as well as local coding events

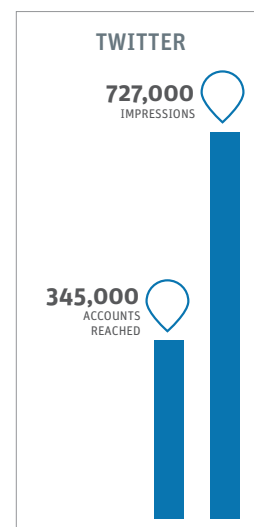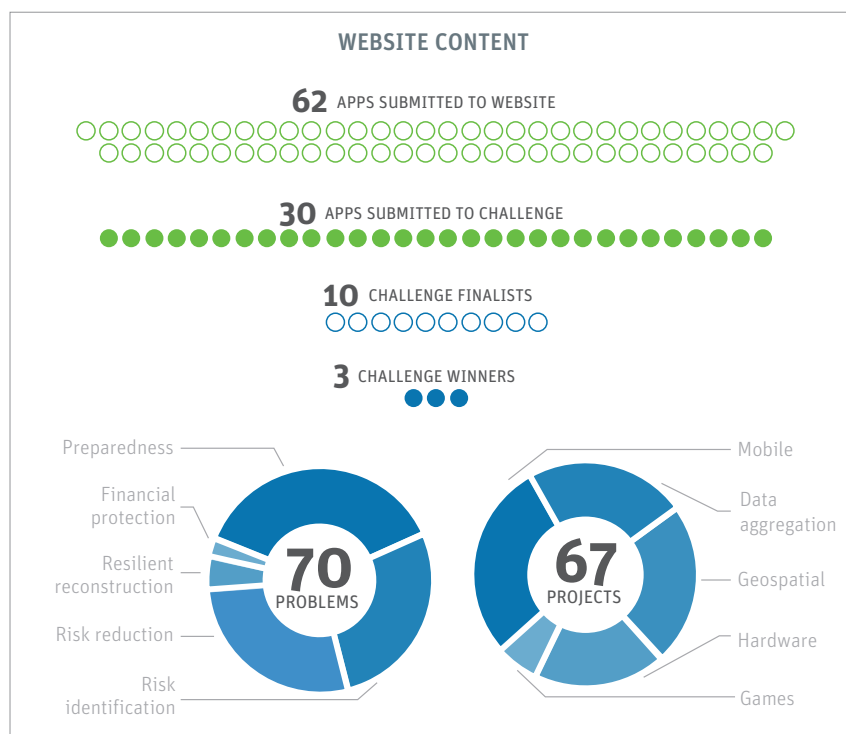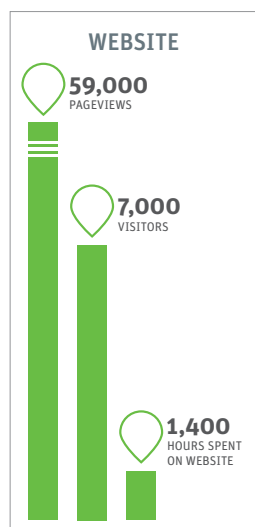### I. The CfR Fellowship and Mentoring Program

Building on the momentum established in 2014, this year CfR will introduce fellowship opportunities designed to engage talented technologists in building tools, communities, and capacity to improve communities' resilience to natural disasters. These fellowships will promote the use of open data and open source software to collect, analyze, share, and improve risk data for better decision-making.

II. CfR coding events

The coding events are organized into the following phases:

1. **Problem Statement Definition and Participant Recruitment:** Code for Resilience draws on the experience and needs of disaster risk management (DRM) professionals to develop a set of challenges.

2. **Kickoff and Participant Trainings:** To help participants frame their project proposals, kickoff events are designed to inspire and connect participants, and provide basic training opportunities on DRM and product development. From this event, teams are formed to work on their selected projects and proposals.

3. **Proposal Review and Project Selection:** Based on the work completed, participating teams submit project proposals. This phase also consists of connecting virtually with groups working on similar projects and mentorship from field experts. The mentorship group then selects finalists to participate in the local code sprint.

4. **Local Code Sprints:** Once the problem statements are clearly defined, end user and stakeholder buy-in is secured, and relevant trainings are provided, selected participants gather to carry out Code Sprints that continue for 48-72 hours to develop a prototype solution.

5. **Remote Mentoring Program:** Winning teams will continue to develop their tools with government partners and the user community while receiving expert advice from CfR partners and experts. This mentorship program seeks to help teams create minimum viable products.

6. **Evaluation and Review:** Participants and partners will have the opportunity to provide feedback on the program and processes to improve program delivery.

Code for Resilience 2014 Overview

WEBSITE CONTENT

62 APPS SUBMITTED TO WEBSITE

30 APPS SUBMITTED TO CHALLENGE

10 CHALLENGE FINALISTS

3 CHALLENGE WINNERS

70 PROBLEMS
- Preparedness
- Financial protection
- Resilient reconstruction
- Risk reduction
- Risk identification

67 PROJECTS
- Mobile
- Data aggregation
- Geospatial
- Hardware
- Games

WEBSITE

59,000 PAGEVIEWS

7,000 VISITORS

1,400 HOURS SPENT ON WEBSITE

TWITTER

727,000 IMPRESSIONS

345,000 ACCOUNTS REACHED

Case study: Selected Tools from CfR 2014

The following tools were some of the winners during Code for Resilience 2014, with continuing development today.

▶ **Nigechizu (Community based evacuation mapping)** A project concept developed by young Japanese architects in their spare time, this app provides maps that include the path of past tsunamis and suggests safe locations for shelter in the event of a disaster.
http://www.nigechizuproject.com/

▶ **Jakarta InaSAFE:** The idea behind this tool is to combine functionalities from InaSAFE* with different systems used by the Jakarta Disaster Management Agency (BPBD) to automate damage and loss assessment reports for Jakarta. Further technical development of Jakarta InaSAFE continues.

* InaSAFE is a free and open source software program that produces realistic natural hazard impact scenarios for better planning, preparedness, and response activities.
http://inasafe.org/

▶ **Messiah** In case of an accident or emergency, the Messiah app relays a distress signal by sending emergency alerts to a pre-identified network of family and friends at the push of a button. Recognizing that often members of local communities are themselves the true "first responders," Messiah enables "samaritans" within its community of users to help one another in times of emergency.
http://www.messiahapp.com/

▶ **Save the Baby!** This application focuses on providing critical maternal, newborn, and child health information in time-sensitive settings such as combating post-disaster disease outbreaks.

Save the Baby went on to win the MIT Climate Lab Code Sprint, and currently is being tested for implementation in the Philippines.
http://mlabo.net/2014/09/5441/

ⓘ **Browse the full catalogue of tools at** http://www.codeforresilience.org

GFDRR
Global Facility for Disaster Reduction and Recovery

www.gfdrr.org/innovation-lab