Empty Space Mapping

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Problem

 During disaster, up-to-date map is critical and currently there is no simple tool for volunteers/people who are affected by disaster to update the map.





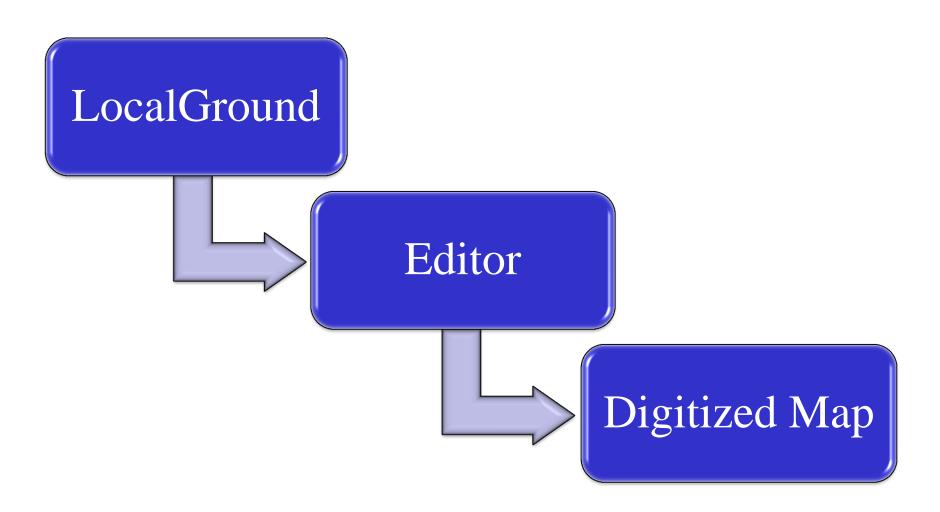
Related Work

- Local Ground has an easy way to map
- Walking Paper has similar but shares only via OSM
- OSM requires GPS or Mobile apps to collect data
- GoogleMaps takes long to update for disaster



Solution Idea

- Use Local Ground as a central collection site to upload map
- Easy collection as paper and pencil is all volunteers need to map.
- Integrate OSM to Local Ground to allow on-site volunteers to just upload what they mapped and let the remote-site volunteers to digitize it. And share as quickly as possible.



Field Work

Tapan Parikh, Sarah Van Wart



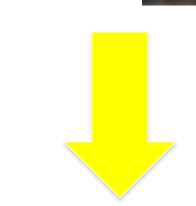
OFF-SITE VOLUNTEERS

ON-SITE VOLUNTEERS

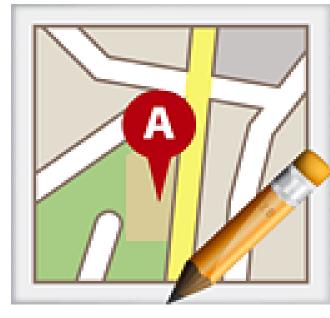
PRINT A PAPER MAP OR USE MOBILE APP

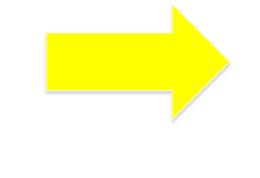






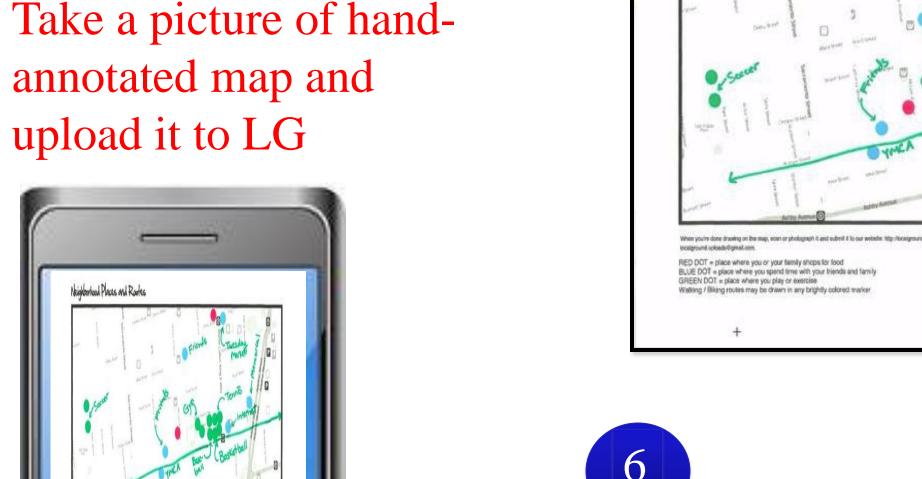




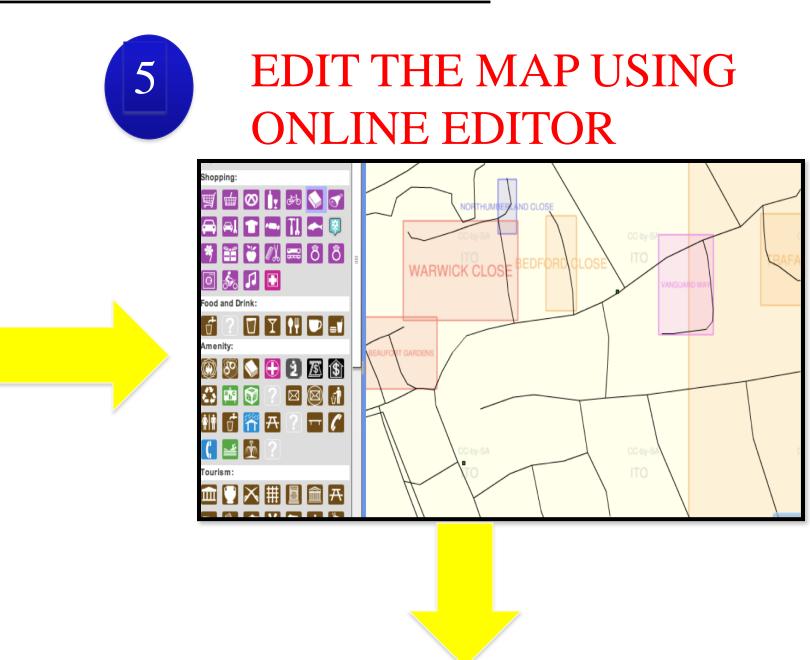


Architecture and Prototype

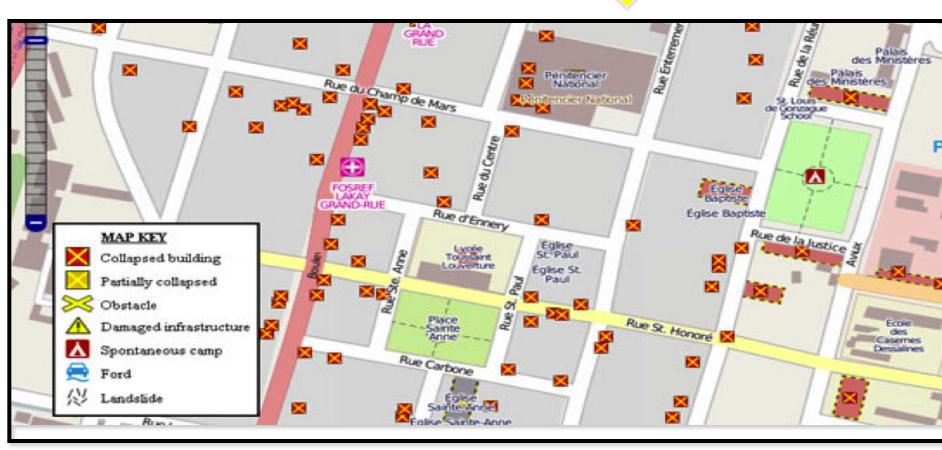
SELECT THE



UPLOADED MAP Neighborhood Places and Routes



PUBLICIZE YOUR MAP OR SHARE WITH FRIENDS



Spring Quarter Timeline

WEEK 1

 Understanding and OSM API. LG source code.

• Learning Potlatch

WEEK 2

customization of Potlatch Editor.

WEEK 3

• Implement the customization of online editor.

WEEK 4

• Integrate the customized online editor to LG website.

WEEK 5, 6

• Test the reliability of the integration. User review.

WEEK 7

• Explore the possibility of data collection through mobile phone.

WEEK 8,9

• GO LIVE!

WEEK 10