

MAR browsers should allow labeling objects

(**GSyC** LibreSoft, URJC)

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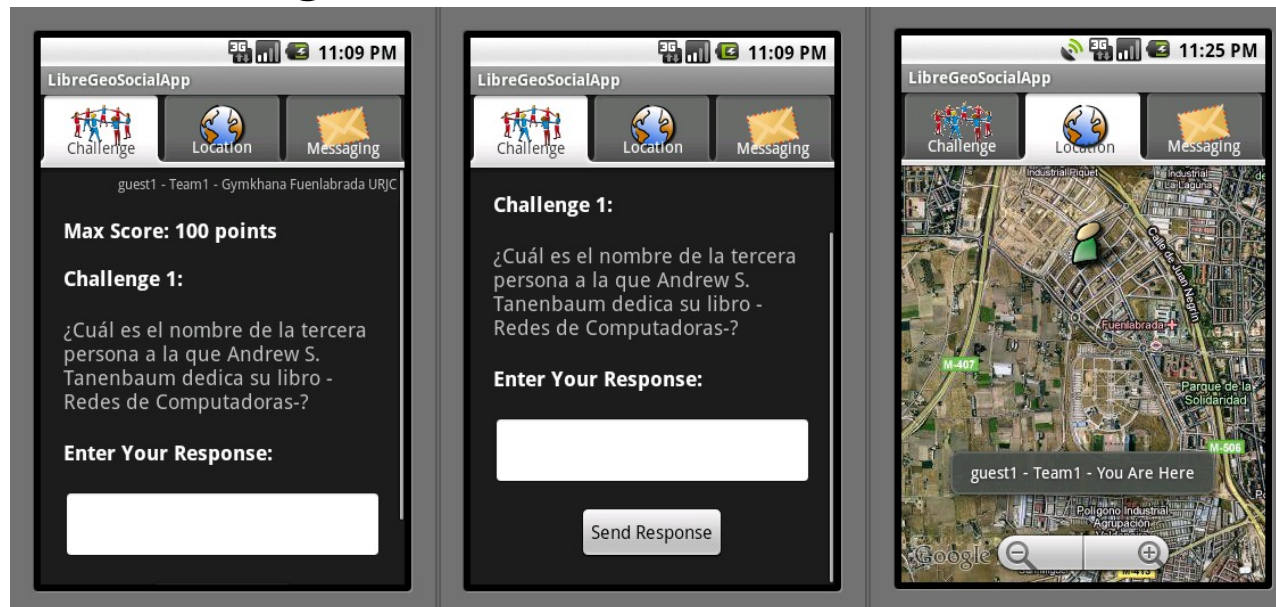
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MAR labeling

- Users can **upload contents** to networks
- AR Browsers: users are info **consumers**, but **no producers** —→ **NOT GOOD!**
- Content labeling utilities: tourism, education, games





FLOSS solutions

- **Important: open standard**
- ¿Why a **MAR FLOSS** (Free / Libre / Open Source Software) base code?
 - Experiments with new applications
 - Reference implementation for standards
 - Faster MAR apps development
 - Promote this market



LibreGeoSocial

- Mobile social network with AR UI
- Social nodes: position and altitude info
- Channels/layers supporting
- Outdoor/indoor scenarios
- Multimedia nodes





LibreGeoSocial

- Advanced privacy system: groups, objects, attributes
- Alarm system
- Not necessary to create account



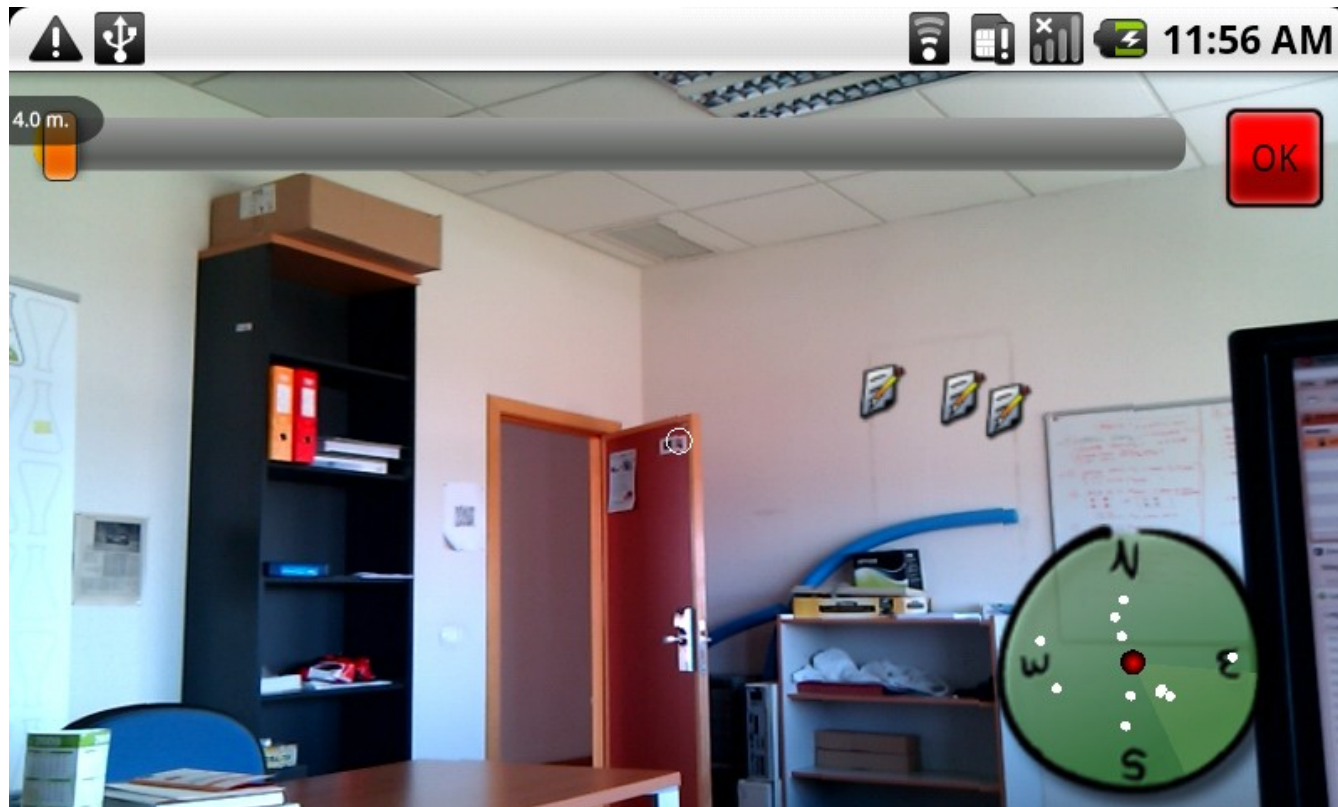
LibreGeoSocial: AR labeling

- Objective: get real resource position and altitude
- Modes:
 - Immediate
 - Fast
 - Map
 - Accurate modes



LibreGeoSocial: AR labeling

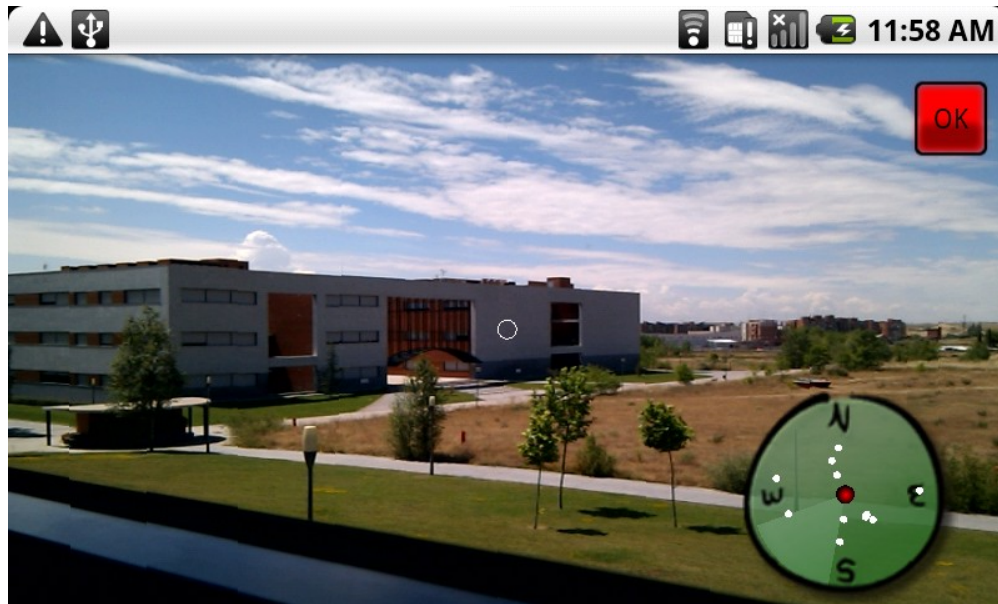
- Fast mode
 - Manually introduction of the distance





LibreGeoSocial: AR labeling

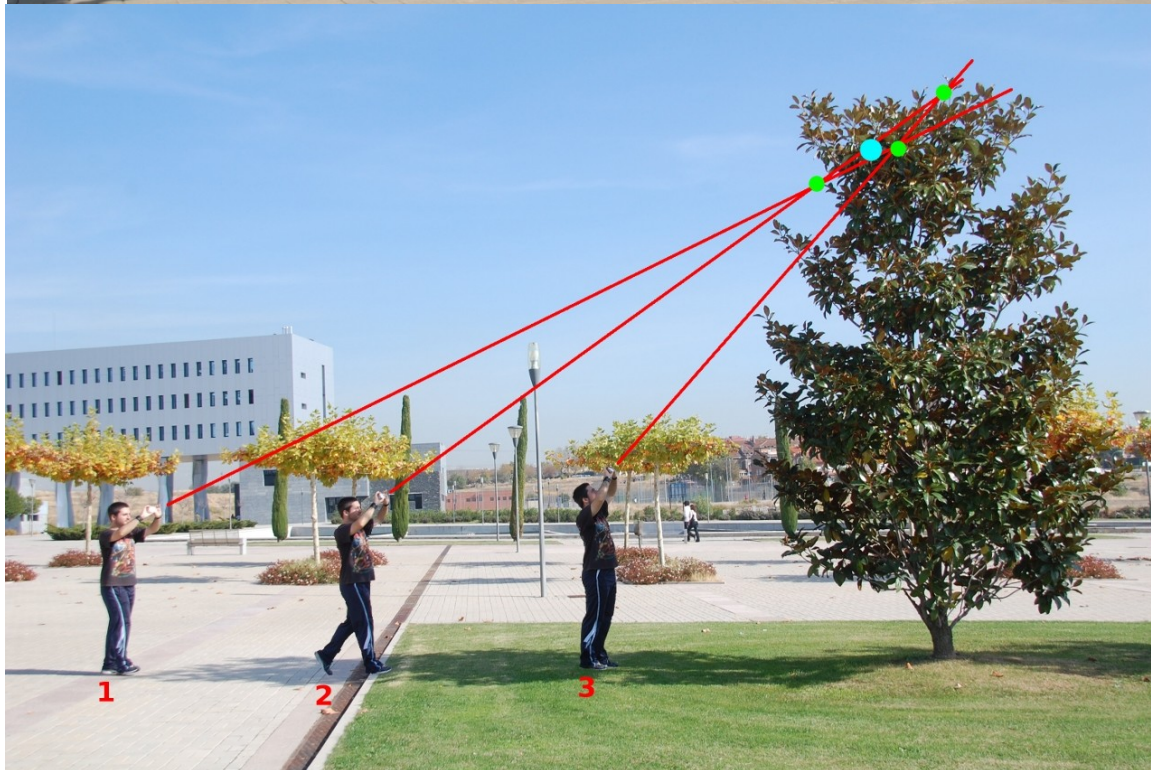
- Map mode
 - Pointing the target in a map view





LibreGeoSocial: AR labeling

- Accurate modes
 - Taking samples of the target from several positions





LibreGeoSocial: AR labeling

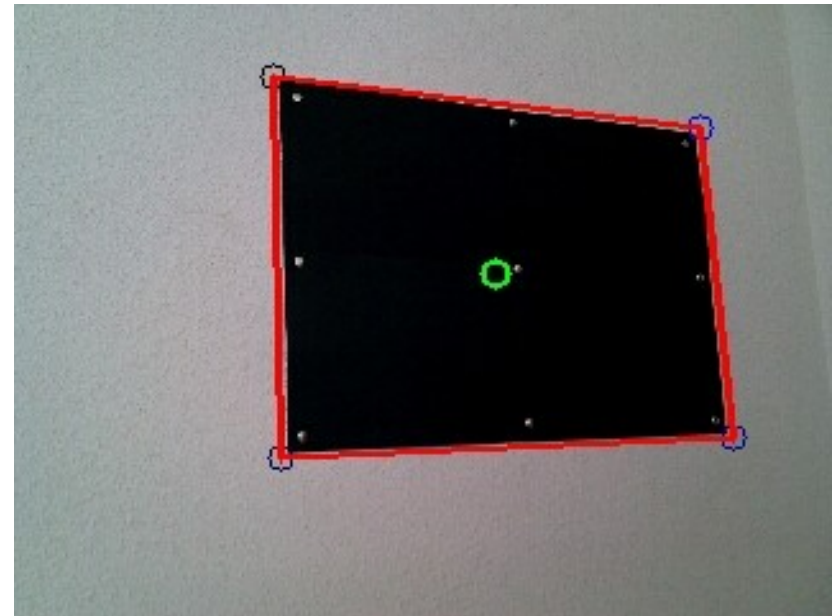
- Real measurements: accurate mistakes
 - Discarding wrong estimations
 - Considering other labeling methods
 - Repetition of the labeling process



LibreGeoSocial

- Open source project
 - Client (Java for Android)
 - Server (Python)
 - <http://www.libregeosocial.org/>
- LibreGeoSocial 1.0 available at Android Market
- ... soon: LibreGeoSocial 1.1

- Improve accuracy: computer vision algorithms
 - OpenCV
- Camera calibration





Thanks

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