Authentication through Multi-Device Interaction

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Authentification

● Popular:
  ○ username/password

● Alternative:
  ○ multifactor authentication
  ○ one time password (OTP)
Devices availability

Smartphone ownership

- **MAY 2011**
  - No cell phone: 17%
  - Smartphone: 35%
  - Other cell phone: 48%

- **FEBRUARY 2012**
  - Smartphone: 12%
  - Other cell phone: 41%

- **MAY 2013**
  - Smartphone: 56%
  - Other cell phone: 35%
  - 9%

By the end of 2013, there will be more mobile devices on Earth than people.

The average age for the first cell phone is now 13.
Devices available

Worldwide Devices Shipments by Segment (millions of units)

- Mobile Phone
- Tablet
- Ultramobile
- Desktop & Notebook

More than 2 billion mobile devices will be shipped globally this year.
Idea

- Three main actors
- Human’s multiple trusted devices
- Task performing
Implementation

- Registration
- Authentication
Implementation

Demo
Future Work

- Implementation for more devices
- Possibility of adding/removing devices
- More restriction during the registration phase
Questions