

Serious games at the UNHCR with ARLearn, a toolkit for mobile and virtual reality applications

Atish Gonsalves², Stefaan Ternier¹, Fred de Vries¹ & Marcus Specht¹

¹Open University of the Netherlands

²UNHCR

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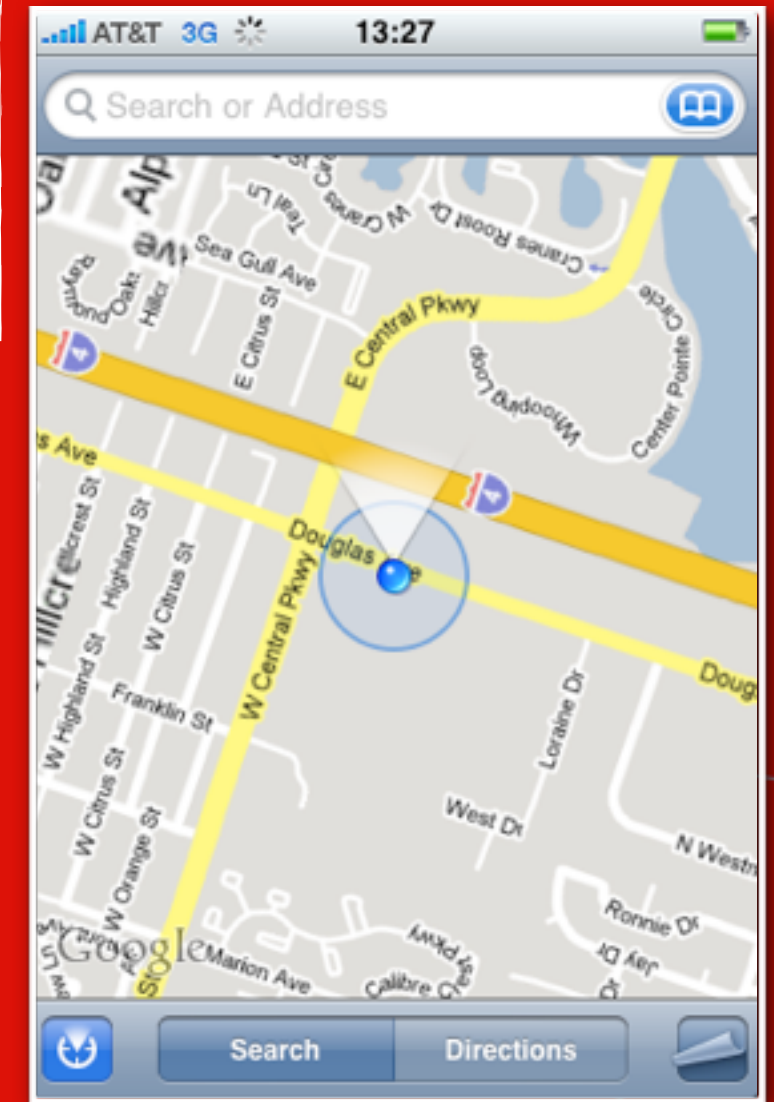
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Augmented Reality

=

camera + gps + accelerometer



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Senses

- sight
- hearing
- taste
- smell
- touch
- balance
-



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ARLearn: hearing



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ARLearn toolkit

Fieldtrip system

Serious gaming

Augmented Reality

mobile app

Virtual reality

Notification framework

Rich media

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ARLearn and Google App Engine Open source



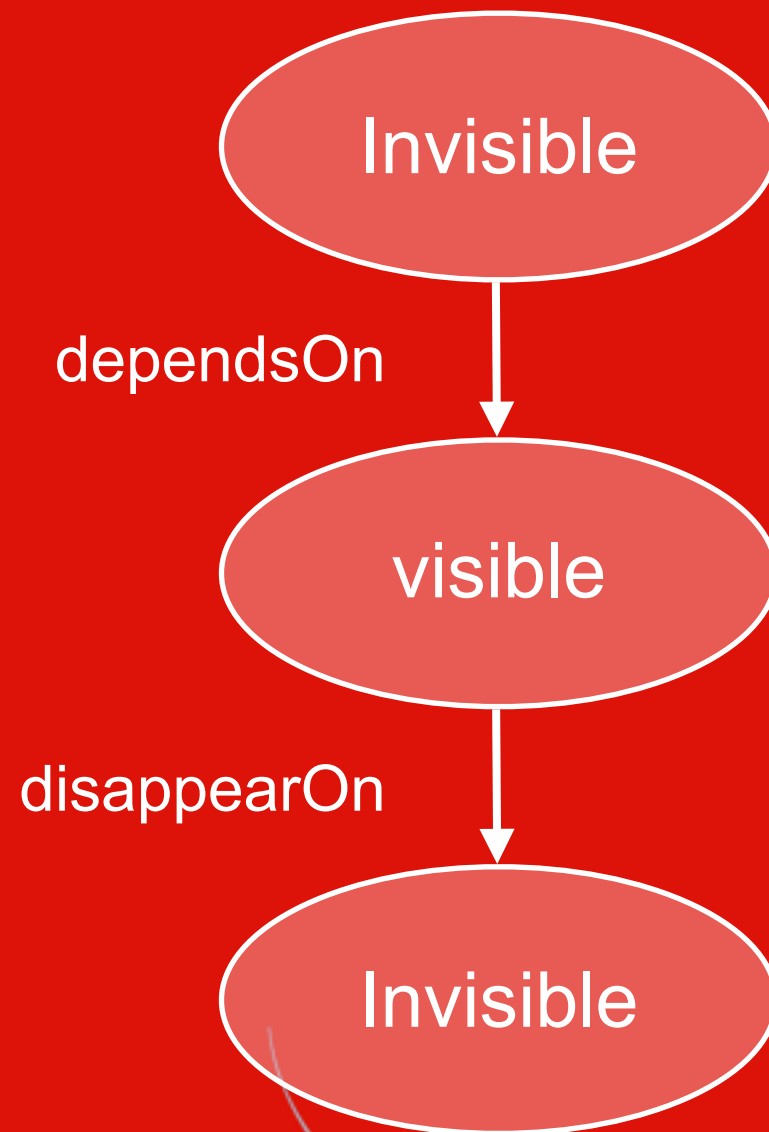
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Serious games

- Scoring
- Progress
- Team play
- Roles



Lifecycle of a media item

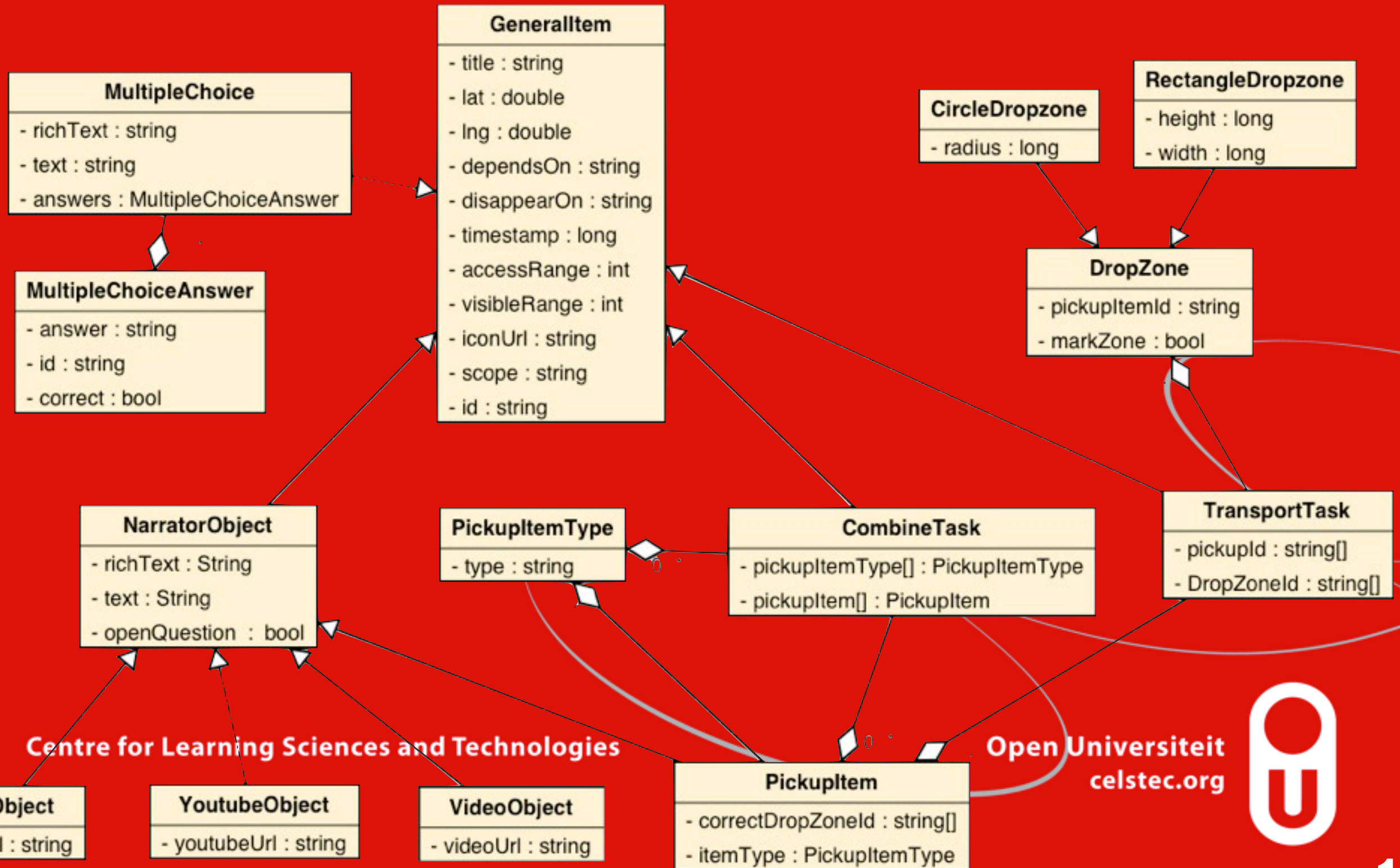


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ARLearn data model

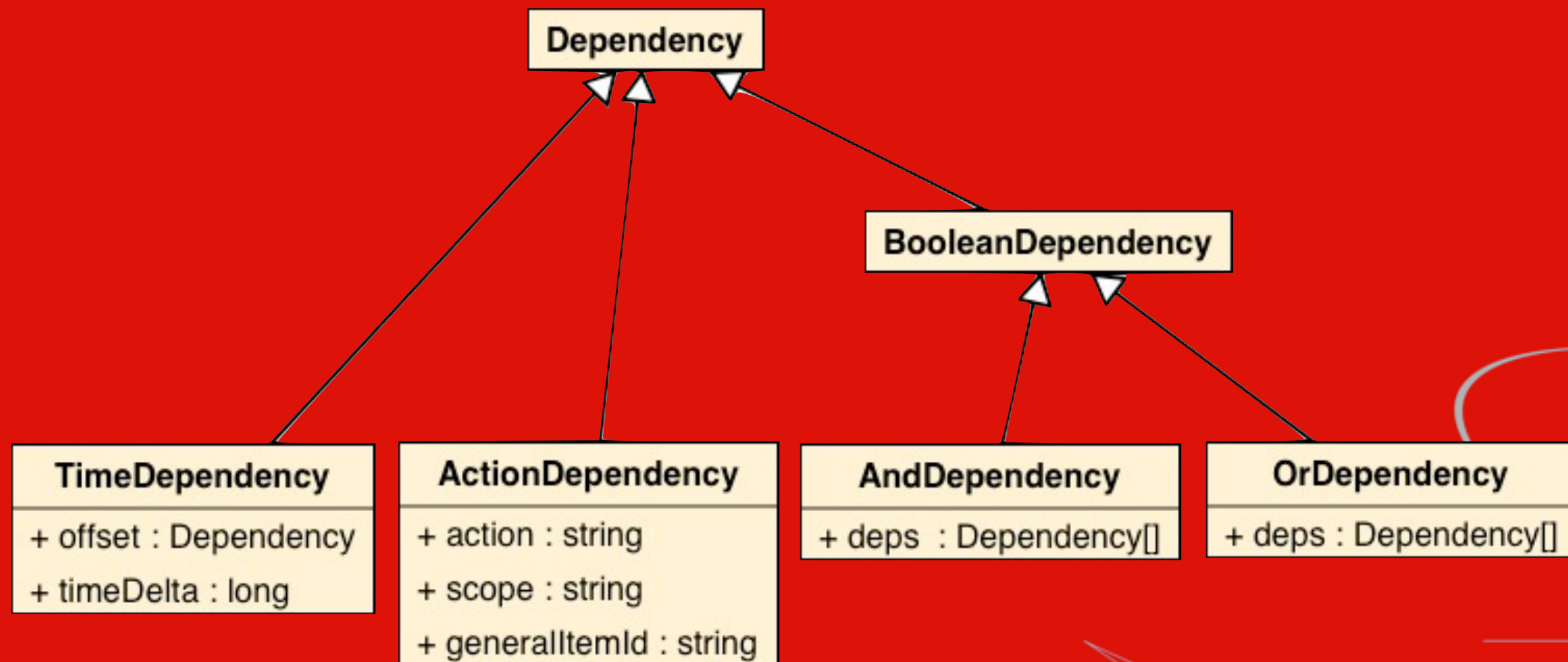


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ARLearn dependency model



ARLearn Case studies

	<i>Florence case</i>	<i>Amsterdam case</i>	<i>Hostage case</i>
<i>Game design</i>	Scavenger game	Adventure game	Decision game
<i>Delivery Channel</i>	augmented reality	augmented virtuality	augmented reality
<i>Pedagogic approach</i>	situated learning	expository learning	learning through decision taking



Hostage Simulation: Real World Training for critical situations



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Roles / teams

Head of Office - Security Officer - Staff Welfare

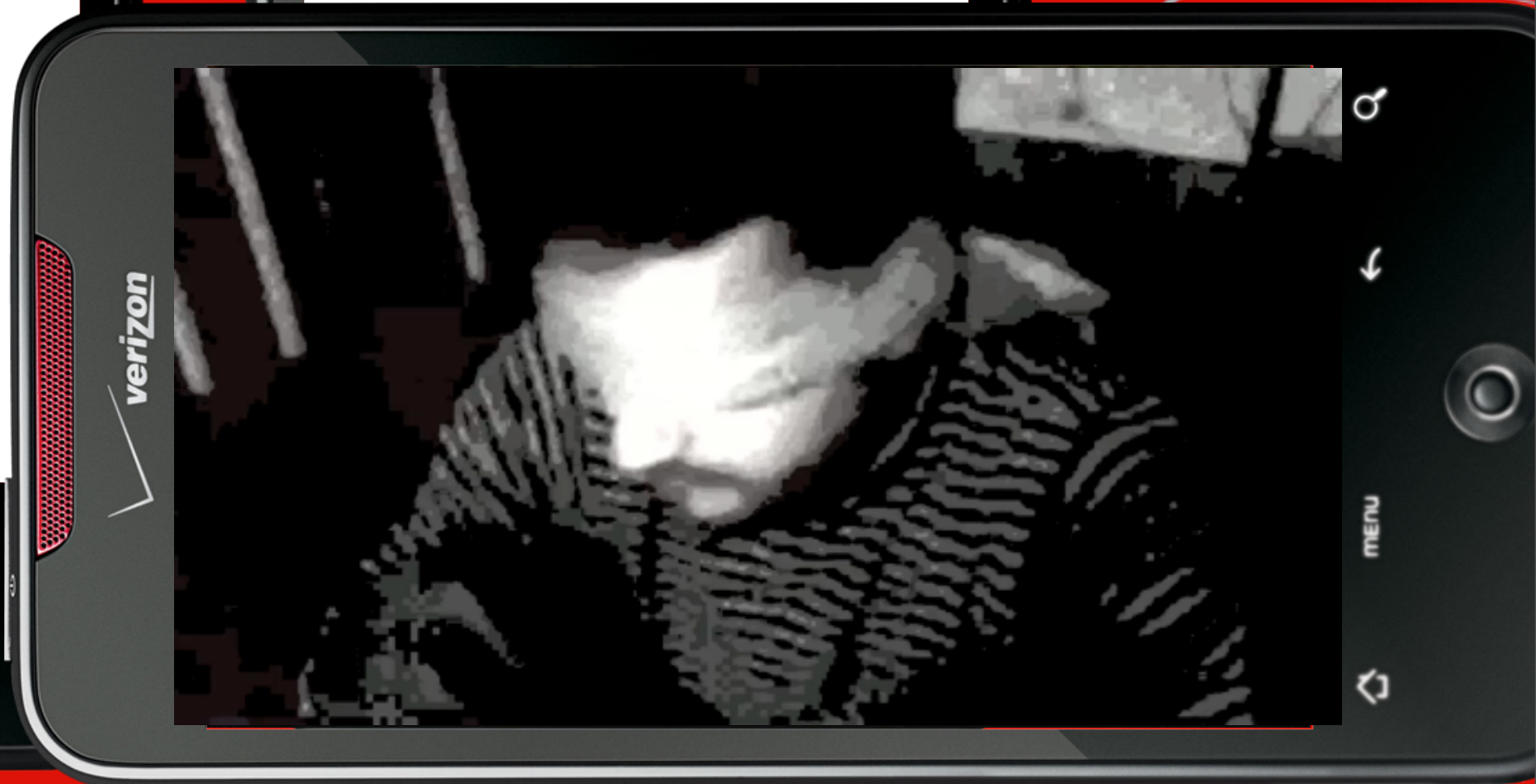
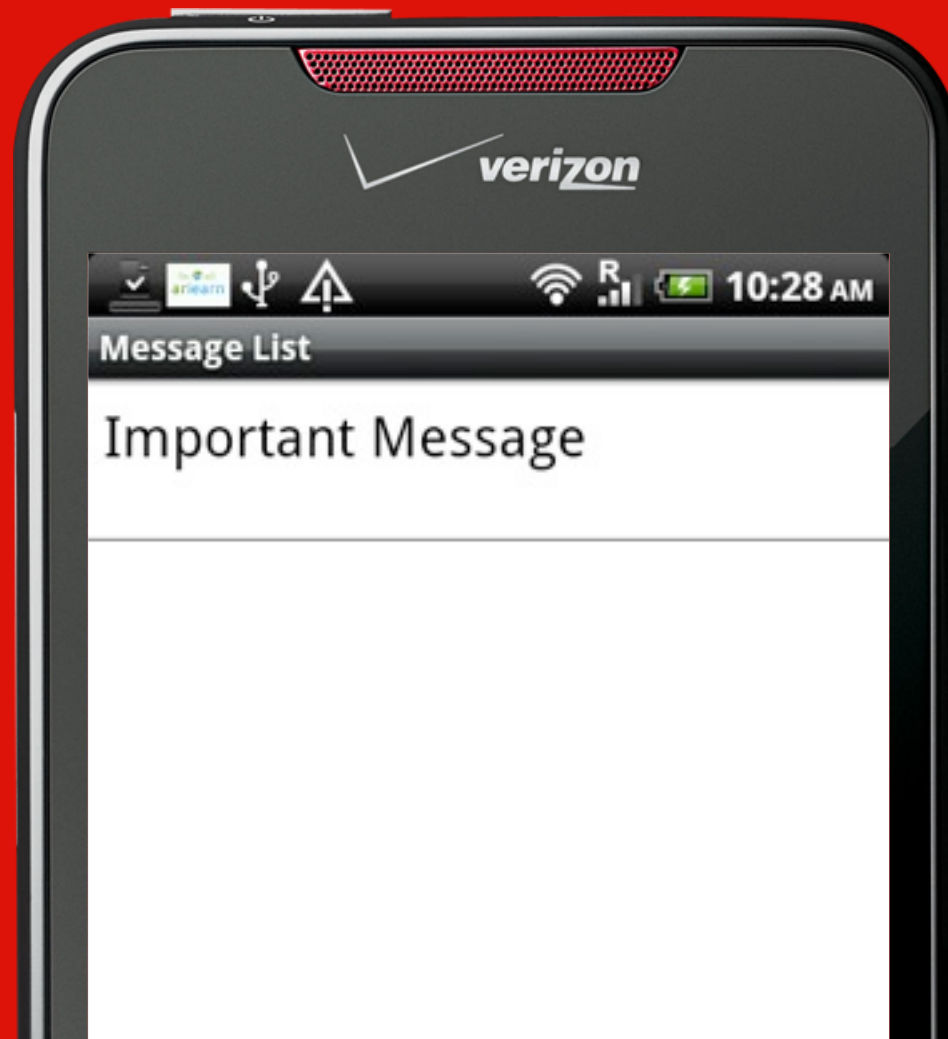
a role is performed by a small group with smartphone.

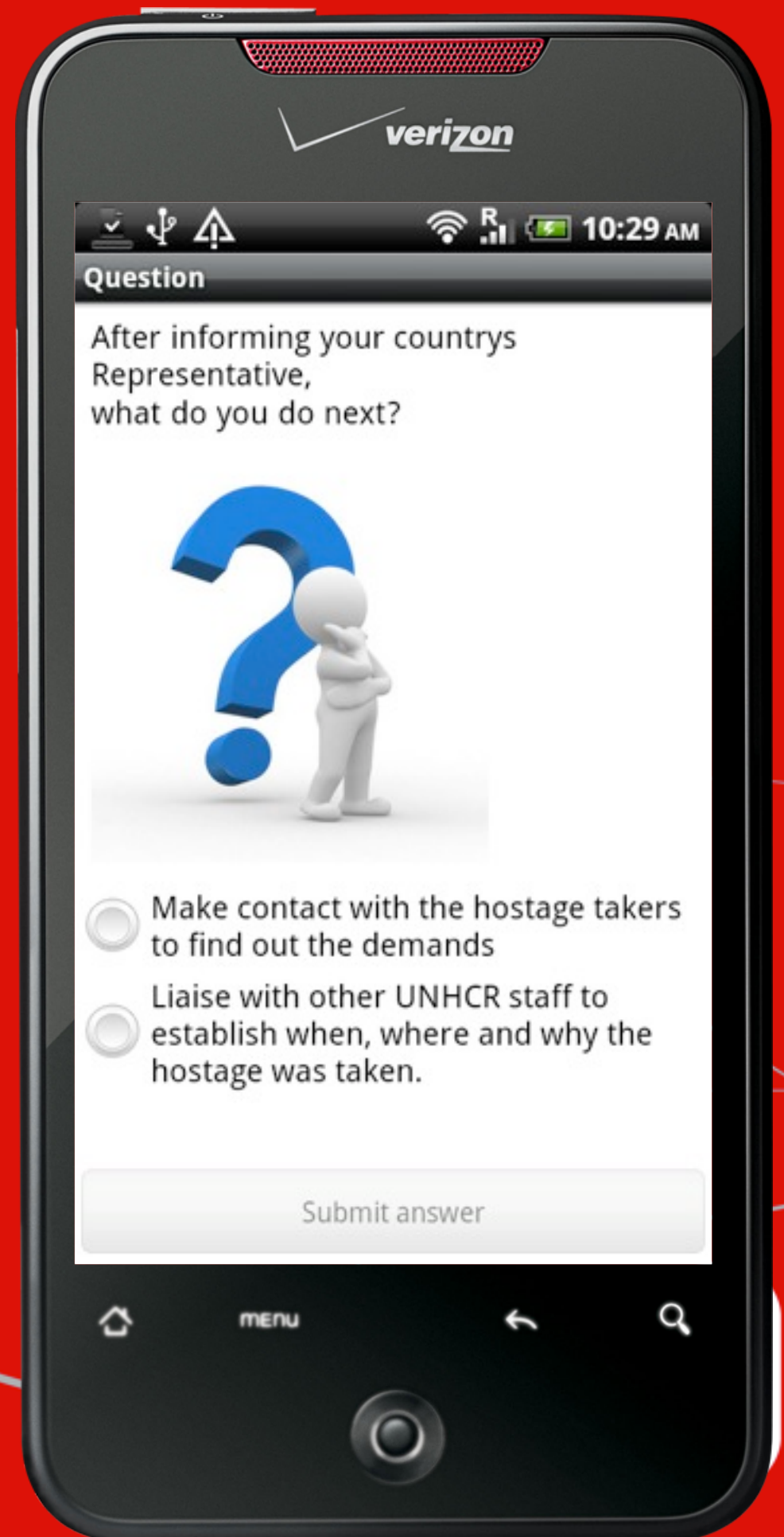
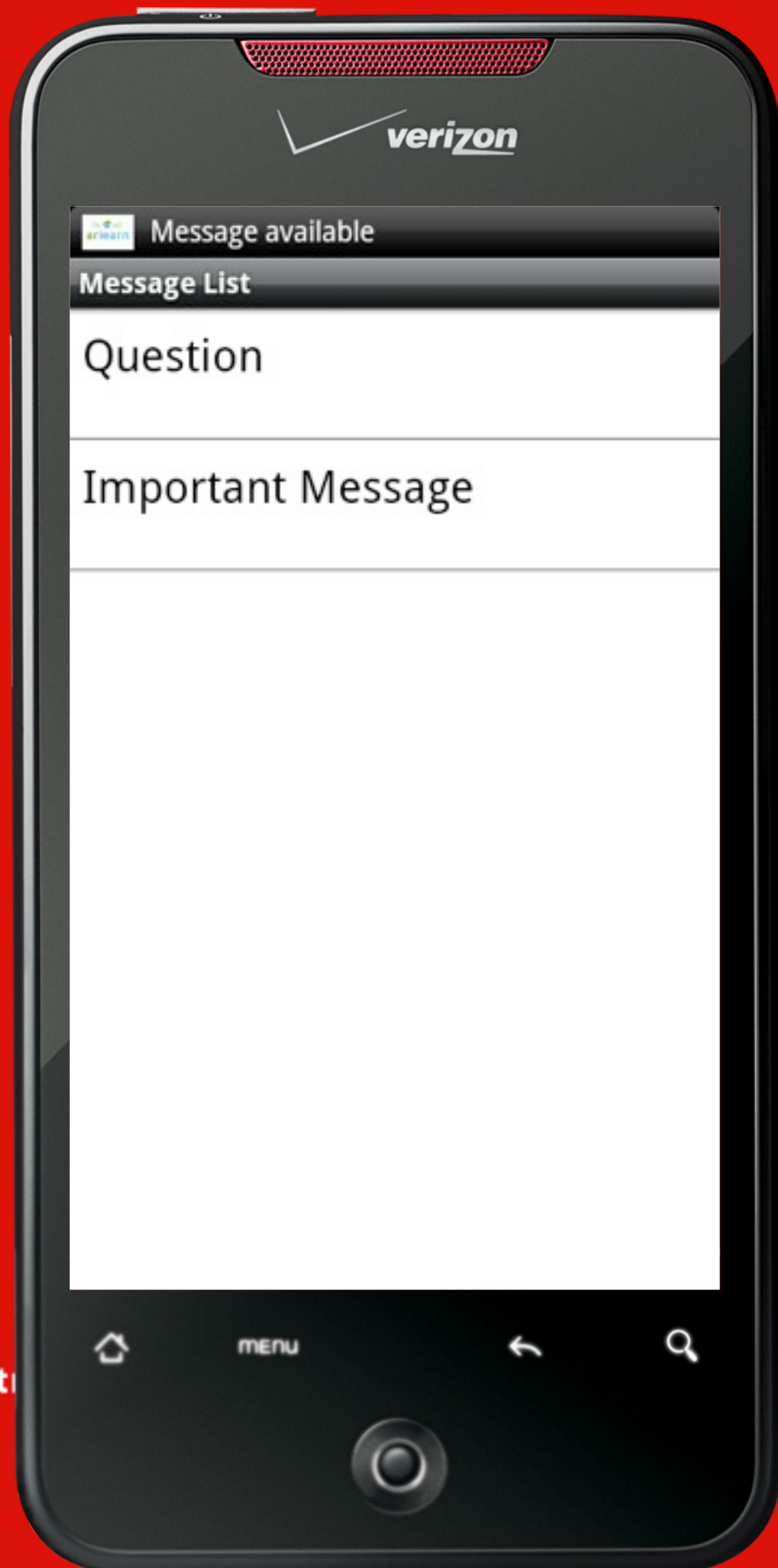
advance organizer for real drill

take decisions / collaborate

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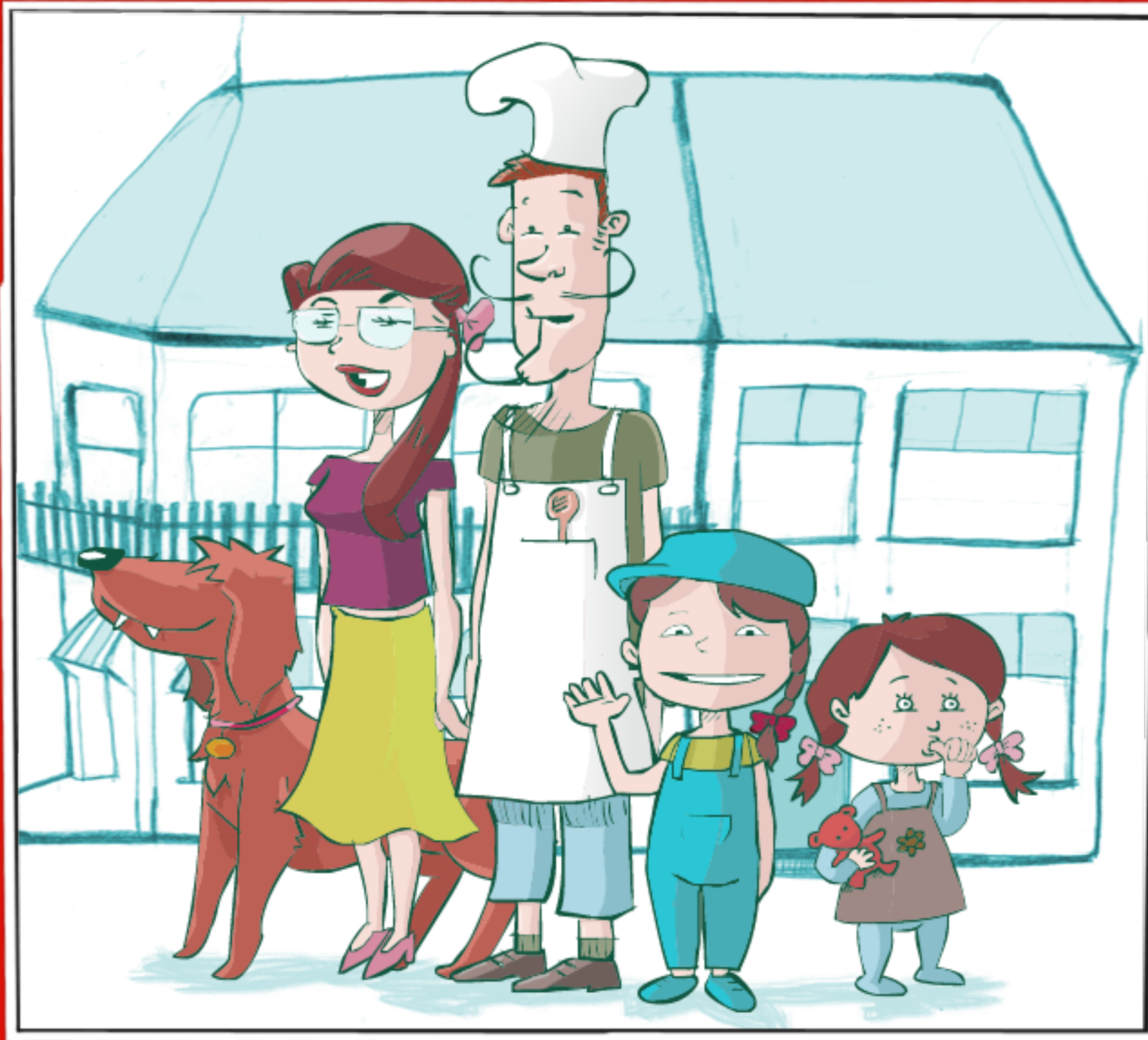






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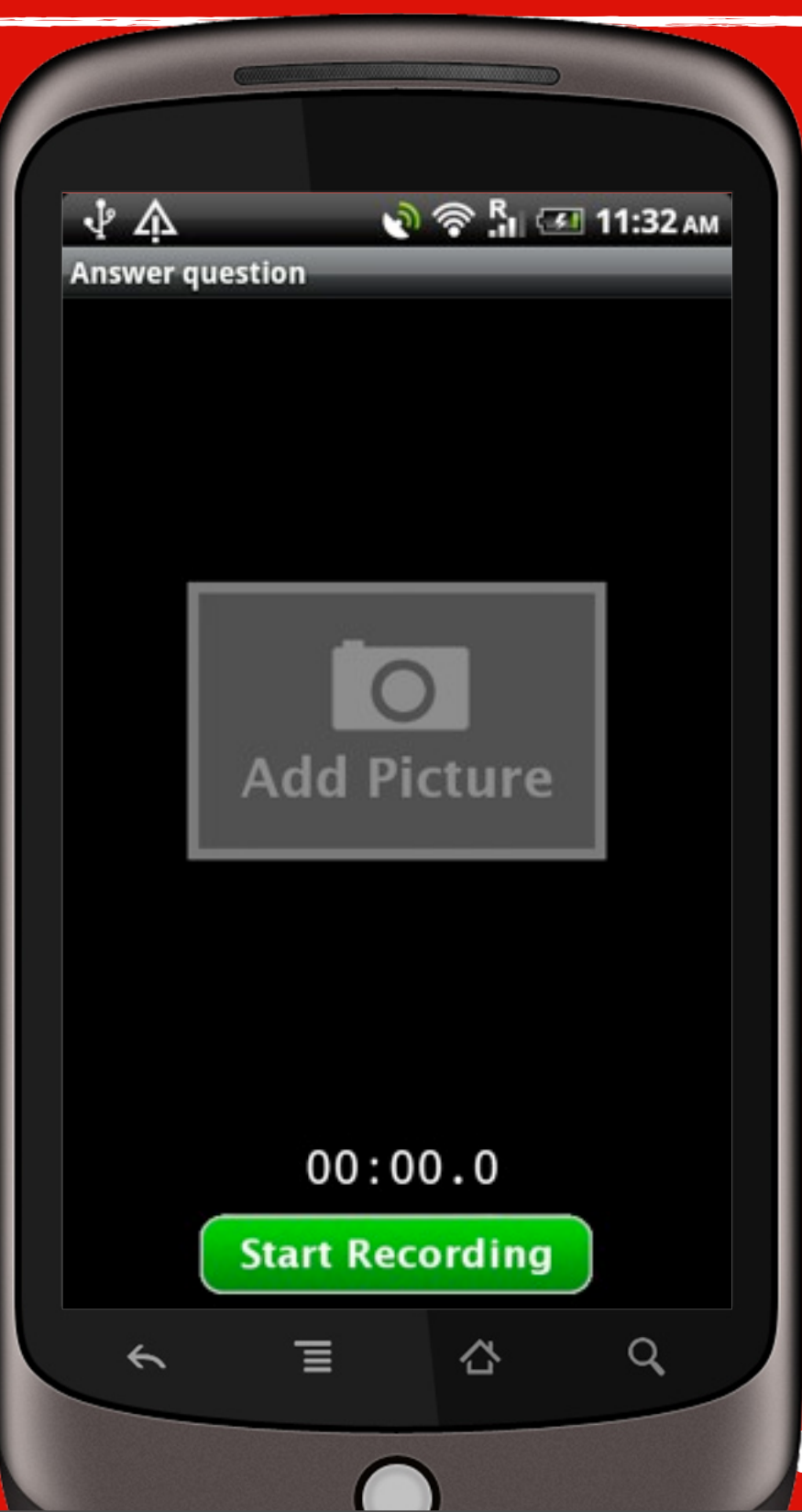
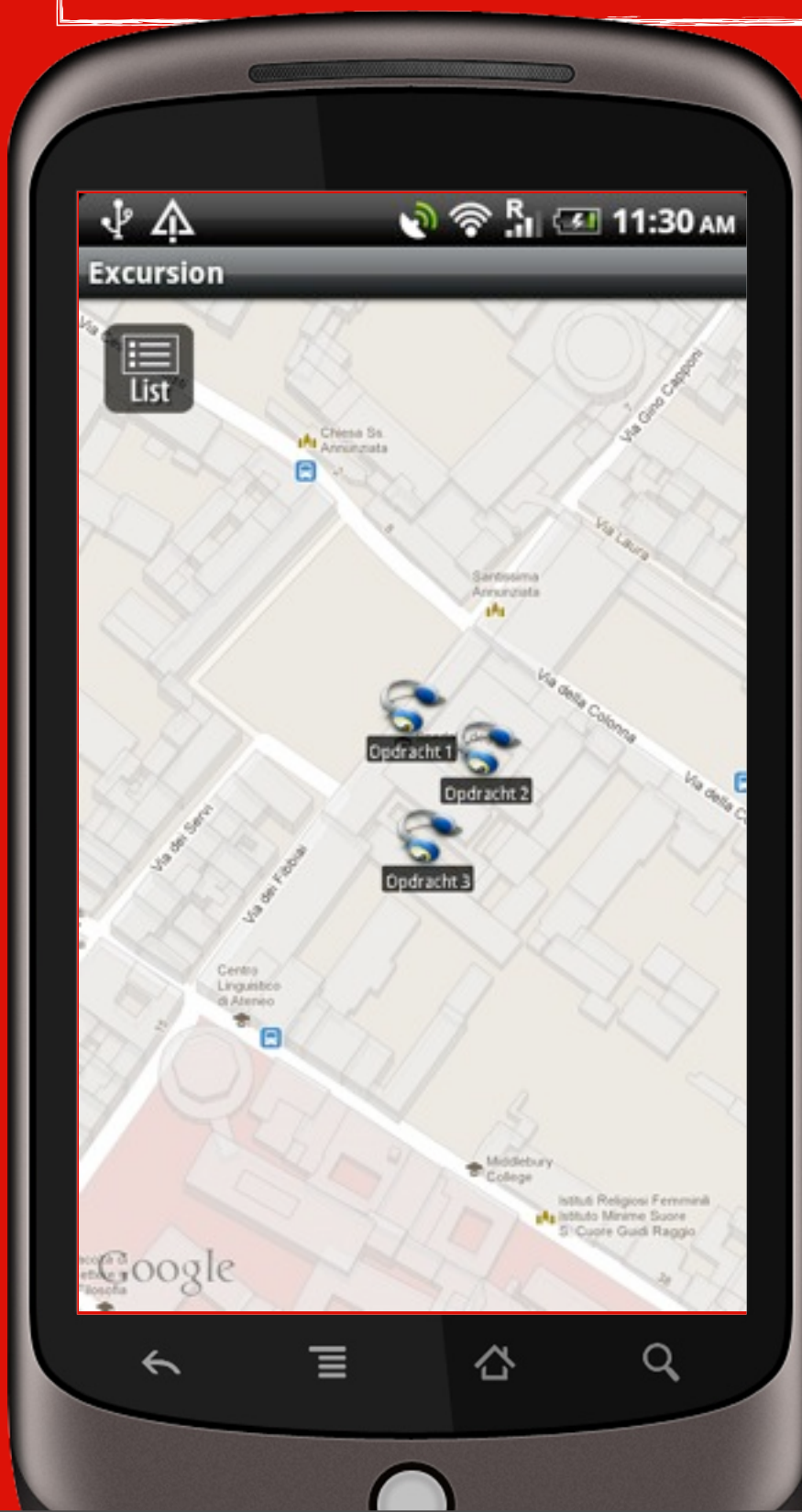
ELENA: language learning for kids (4-6y)



context!
game patterns



Cultural Science Fieldtrip in Florence



Streetlearn: ARLearn streetview client

The screenshot shows the StreetLearn ARLearn streetview client interface overlaid on a Google Street View of Keizersgracht, Amsterdam. The interface includes a top navigation bar with team names (Team One, Team Two, Team Three, Team Four) and a score table. A central question box asks about the architect of a gallery, with three multiple-choice options: F.J. Dupont, A. Bodon, and J.F. Staal. A right-hand sidebar lists various locations with distances and icons. The bottom of the screen shows a 3D AR overlay with a question mark icon, a green flag, and a cardboard box with a green arrow pointing down.

Keizersgracht, Amsterdam
Address is approximate

Team One	Team Two	Team Three	Team Four
Teamscore: 10	Bonus: 0		
Arlearn1 Account	Score: 40 (you)		
Arlearn2 Account	Score: 50 226.088m		

STREETLEARN

Locations

- 2021.913m
- 2172.137m
- 8.987m
- 12.576m
- 7.283m
- 12.908m
- 213.407m

Pickups

Inventory

Help

About

Architecture of the gallery

A visitor in the gallery is proud of her knowledge about the debate over the architecture of this building. She says, that a famous architect state: "Hier wil ik geen discussie over hebben, dit ontwerp keur ik zonder meer goed". But she forgot who it was. Can you help?

From which architect was the quote?

A. F.J. Dupont

B. A. Bodon

C. J.F. Staal

Next



More...

- <http://portal.ou.nl/web/topic-mobile-learning/>

The screenshot shows a web page titled "Learning Sciences & Technologies Topic Mobile Learning". The breadcrumb trail is "Dashboard > Learning Sciences & Technologies > Introduction". The main navigation bar includes "Introduction" (active), "Blog", "Events", and "Masterclasses". The left sidebar contains a "Welcome" section and a list of topics: Theory, Methods and approaches, Applications, ARLearn suite, Get Started, Open Question, Audio, Dependencies, FAQ, Developers, and AR Contact Cards. The main content area features a "Get Started" section with a four-step manual: 1. Download the ARLearn app from the google play, 2. Create your first game, 3. Create a run, to deploy the game on your mobile devices, 4. Open ARLearn on the mobile device to play the game. Below this is a section for the "ARLearn smartphone app" stating it is only available for android. At the bottom right, there is a "SHOP ANDROID APPS" button and a card for "ARLearn" by Stefaan Terrier, CEL/STEC, with tabs for "OVERVIEW" and "USER REA".