

ARPost-its

**Mobile Application for Agile Software Engineering
using Augmented Reality**

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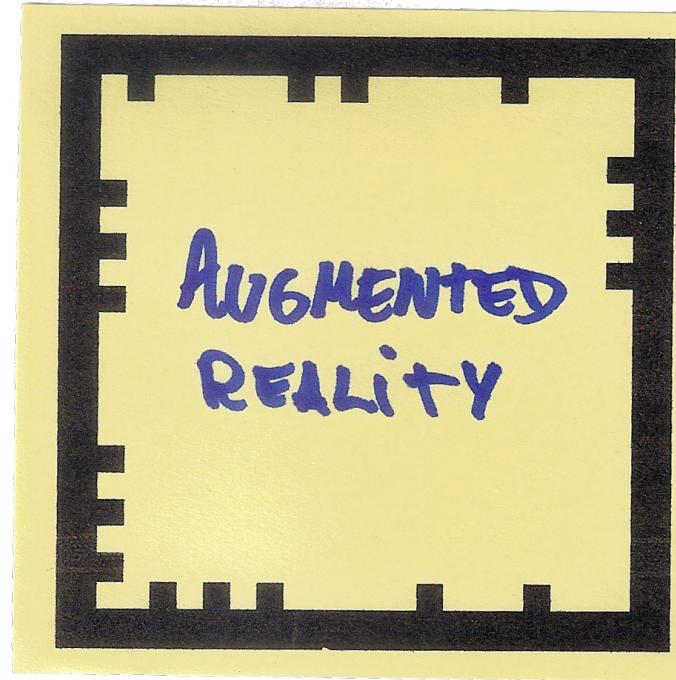
Claudia Werner

Claudia Rodrigues

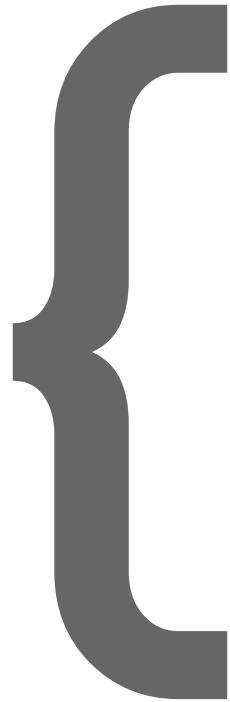
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Introduction

ARPost-its aims to **help agile teams** maintain **organized task boards** and more **efficient stand-up meetings**.



ARPost-its



Agile Software Engineering
Post-it Notes
Augmented Reality
Mobile Computing
Cloud Computing
Open Source

Agile + Post-its

Task boards

Work **items planned** to be developed in an **iteration** is organized in **information radiators**.

Post-it notes are used to represent work items at **paper-based** task boards.

Stand-up meetings

The team reunites **daily** around the task board for **inspection** and **adaptation** of the project progress.

This meeting must be **short** and **efficient**, lasting no longer than 15 minutes.

Visual Pollution!



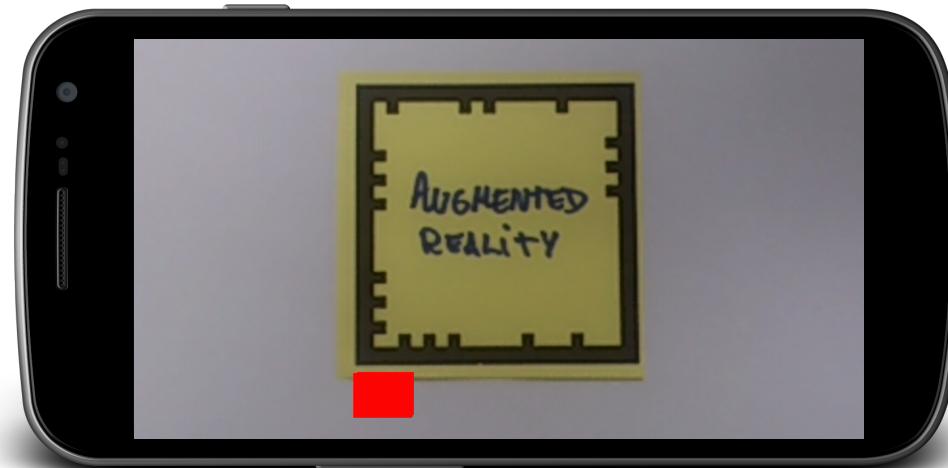
Augmented Reality

Augmented Reality **enriches** the real world with **virtual objects**.

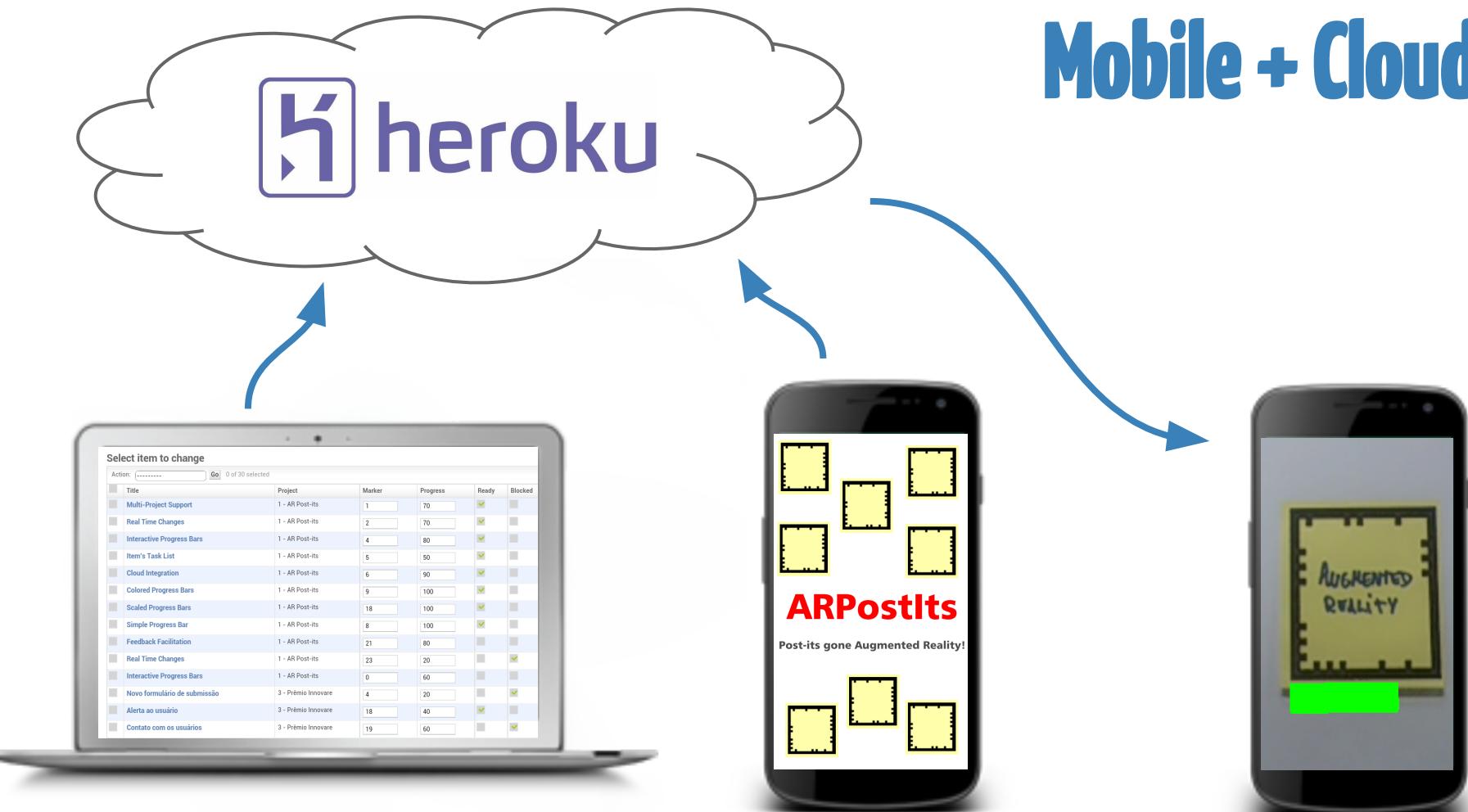
These virtual objects are usually displayed on top of **markers**, detected with **image recognition** techniques.

ARPost-its uses Qualcomm **Vuforia** mobile vision platform. It supports encoded **frame markers**.

Ready
or
Blocked?



Mobile + Cloud



Open Source

ARPost-its is an **open source** application.

Code is available at:

github.com/dhiana/ARPostIts



Initial Feedbacks

ARPost-its was used by a **small team** of four developers.

The feedback gathered suggests that the application helps keeping **efficient, energetic** and **engaging stand-up meetings** with **clean, organized** and **updated task boards**.

TO DO

- Otorgar Subvenciones
- Auto consumo
- Gestión de Propuestas
- Formulario de Contacto
- Alesta al Usuario
- Navegar entre los tipos de Subvenciones

Doing

- Los por Email
- Logging en file
- Deploy Automatizado
- Contacto con Usuarios
- Marketing digital



concrete solutions



concrete solutions

ARPost-its for Agile Education

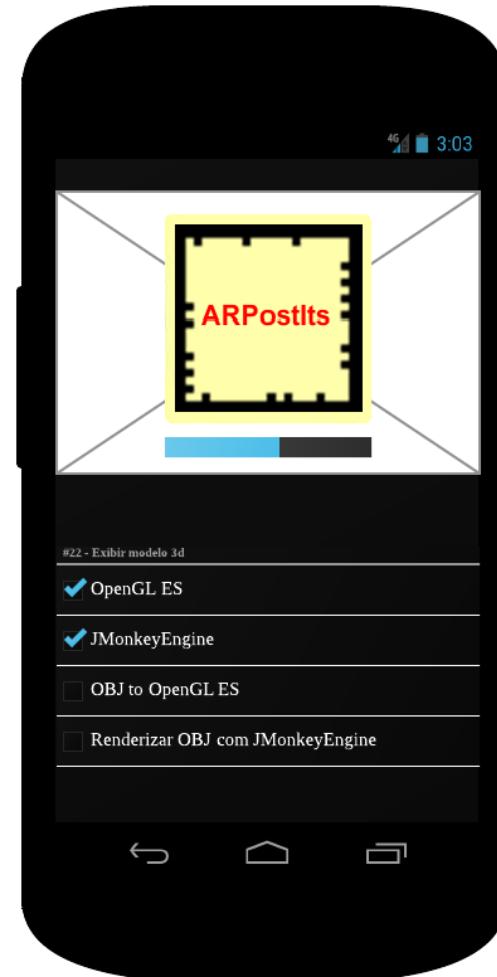
Augmented Reality is well known to be an **invaluable technique** for **education**. It **enhances** traditional learning methods by fostering more **engaging participation** of students.

ARPost-its has potential to be used for **agile software engineering education** with the use of templates of **typical agile projects scenarios**.

Future work

ARPost-its should support other types of virtual objects, like **checklists** of tasks related to a work item.

It should also allow the users to **collaboratively** update the progress of the items in **real-time** while **interacting** with the virtual progress bar.



Final considerations

ARPost-its was conceived by **undergraduate students** as a **final project** for the Augmented Reality class. It was developed in only **four iterations**.

In this context, there were **limited resources** to run a **formal experiment**.

Finally, this work shows that **high-level software platforms** for augmented reality offer software engineering **students** and **professionals** incredible abilities to **quickly** develop **innovative applications**.

Thank you!