ALICE Connex

Mobile Volunteer Computing and Edutainment Platform

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ALICE Connex

Mobile Volunteer Computing

Edutainment

Why Mobile Volunteer Computing?

- Number of smartphones already overtake number of personal computers in 2014

- Smartphone is inactive and plugged-in on average of 7 hours each night

Reference : Lella, Adam, and Andrew Lipsman. "The US mobile app report." 21st August, available at: http://www. comscore. com/Insights/Presentationsand-Whitepapers/2014/The-US-Mobile-App-Report (accessed 8th April, 2015) (2014).

Arslan, Mustafa Y., et al. "Computing while charging: building a distributed computing infrastructure using smartphones." Proceedings of the 8th international conference on Emerging networking experiments and technologies. ACM, 2012.
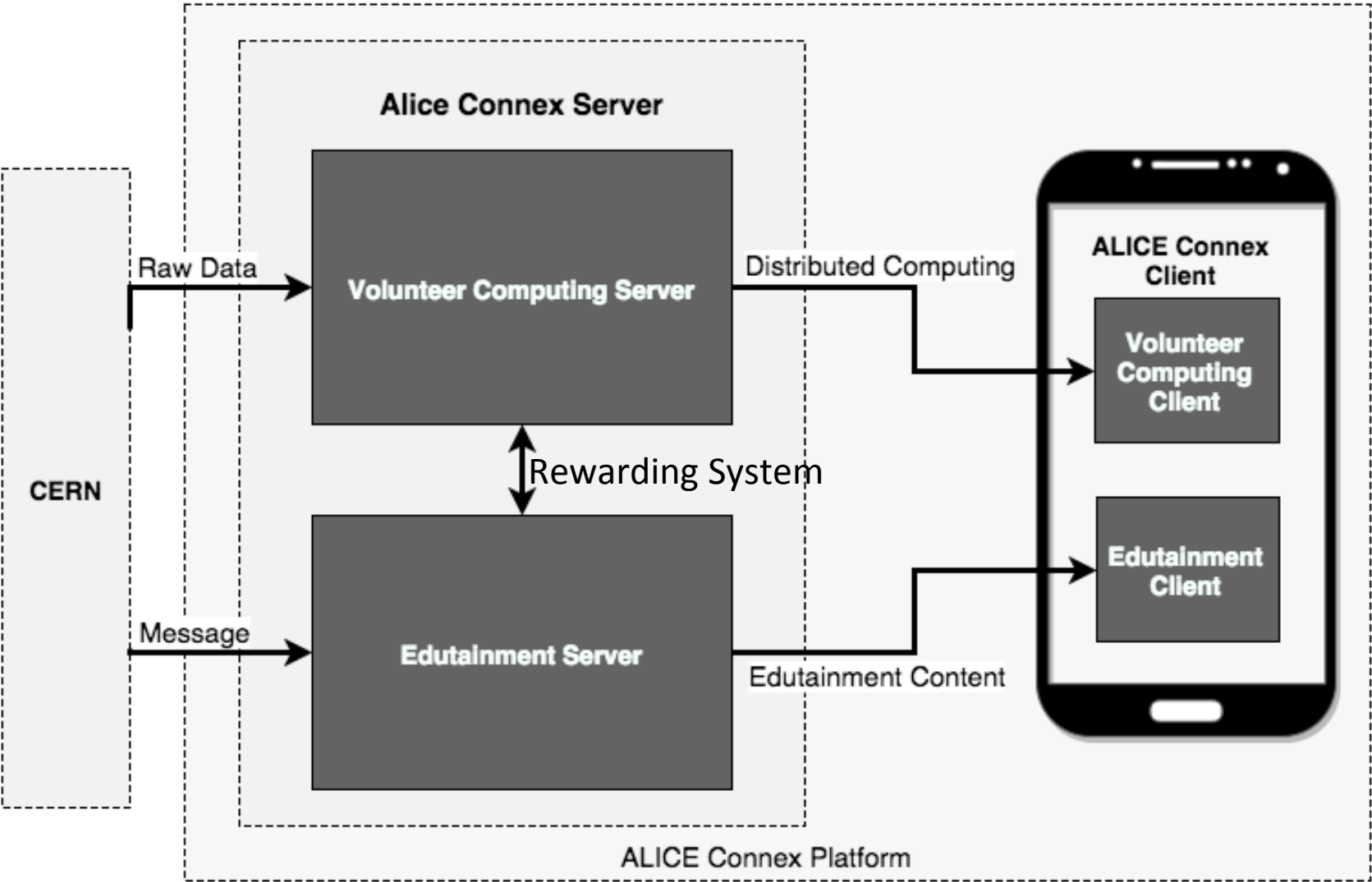
Why Edutainment?

- Public education focus on knowledge

- Channel to approach young generation
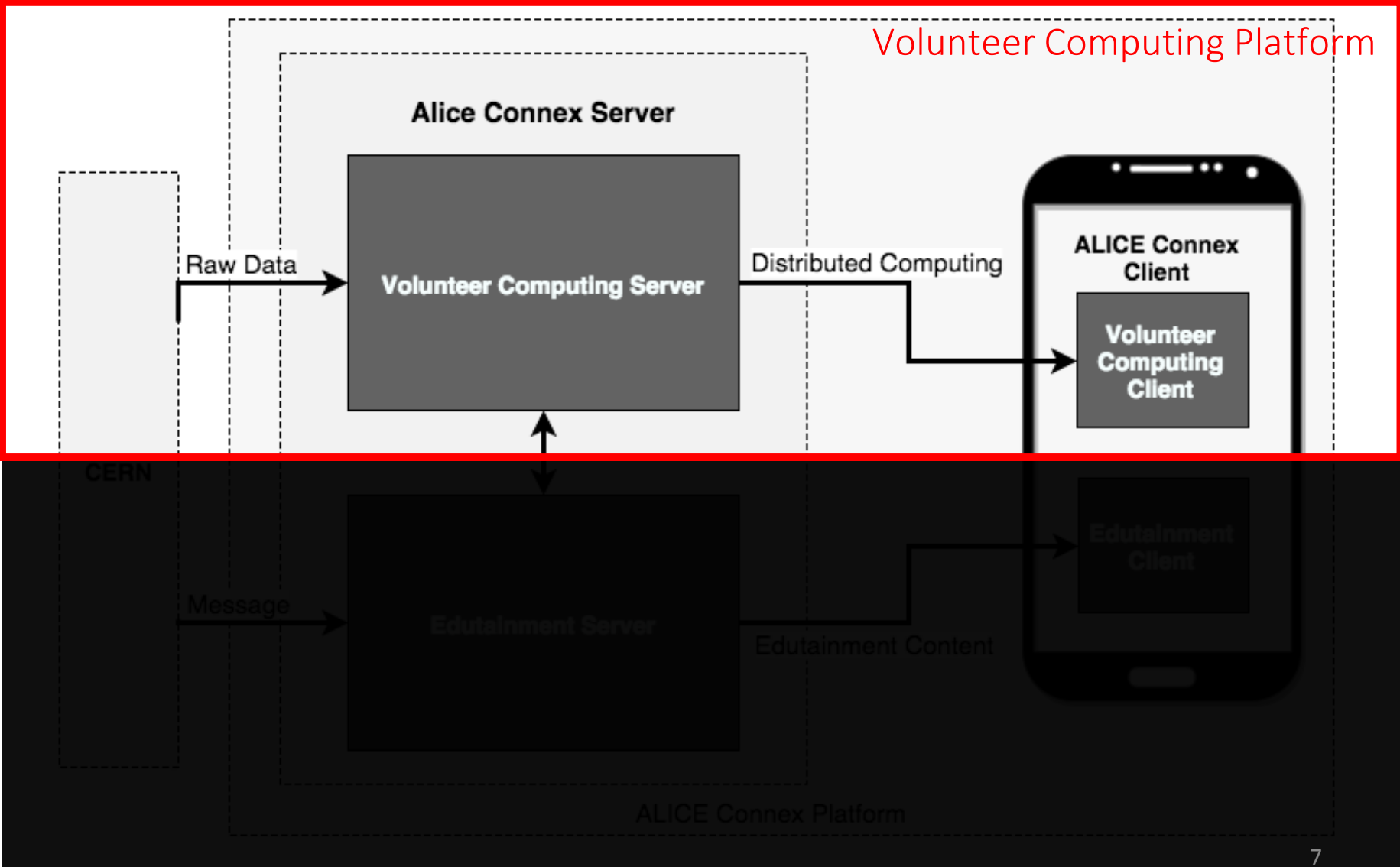
Aim & Objective

- Exploit Inactive cycle of Mobile Devices (Volunteer Computing)

- Promote Science to the communities (Volunteer Computing / Edutainment)

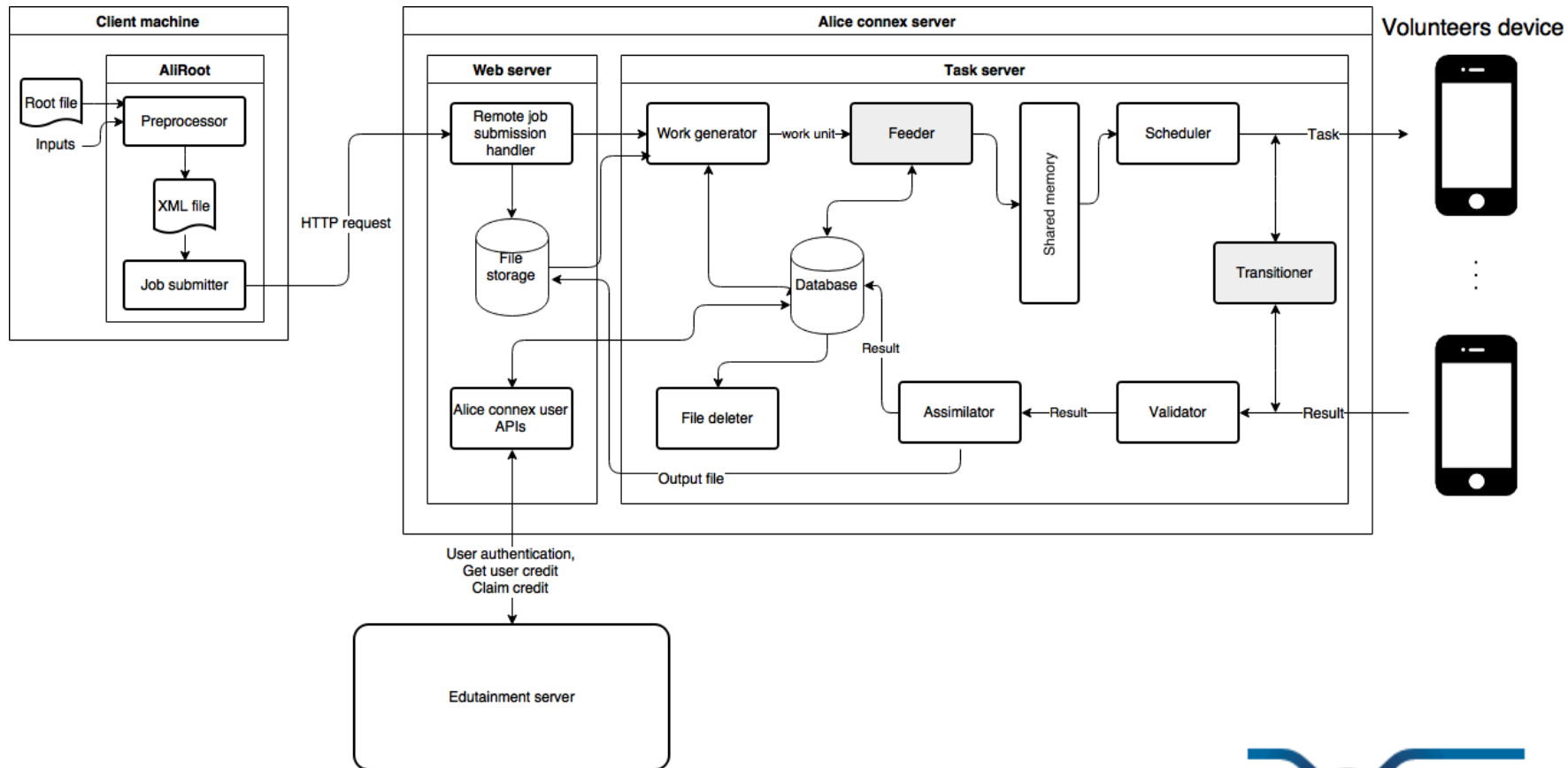- Promote Science to Young Generation (Edutainment)

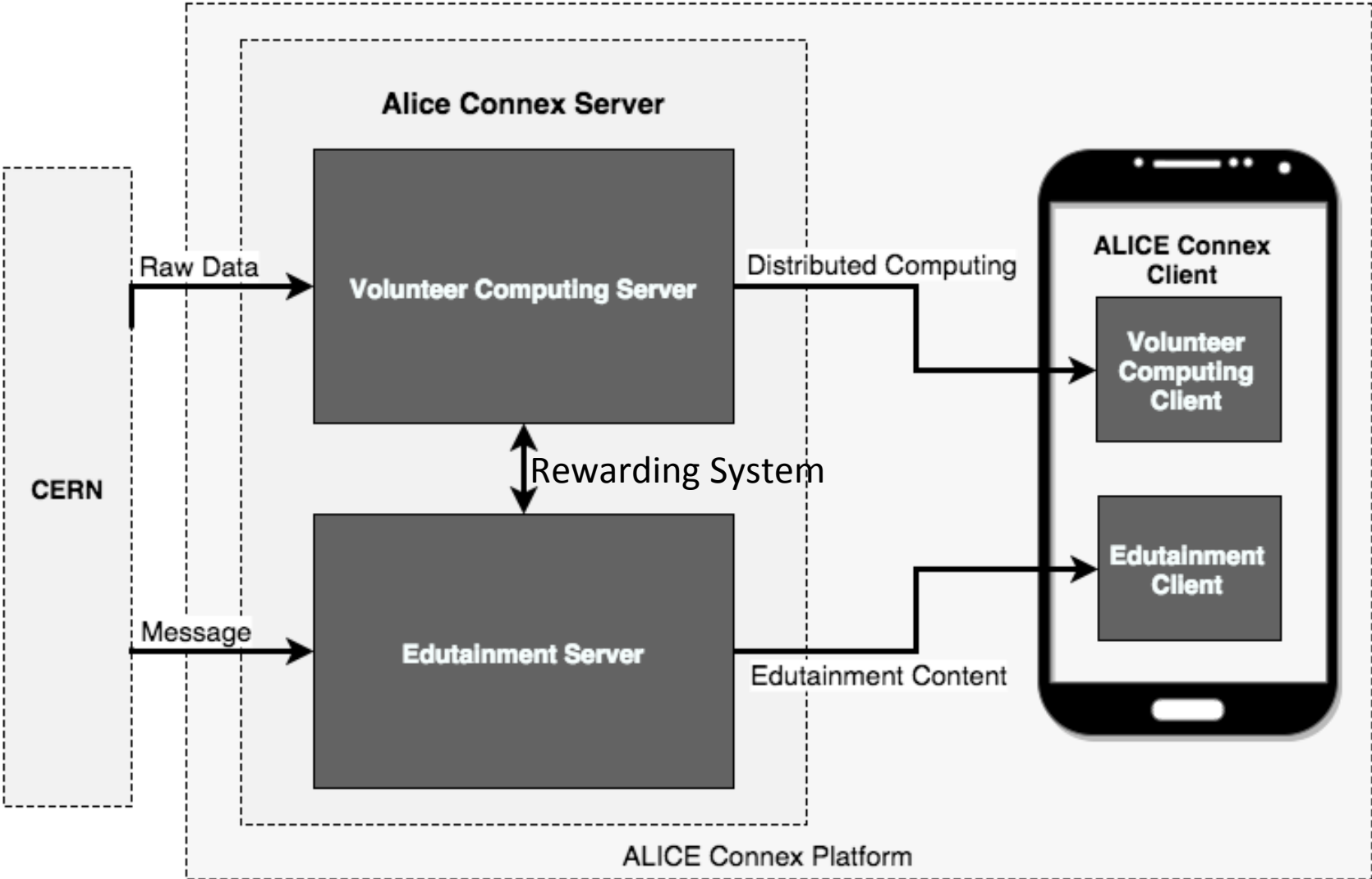# Overall Design of ALICE Connex
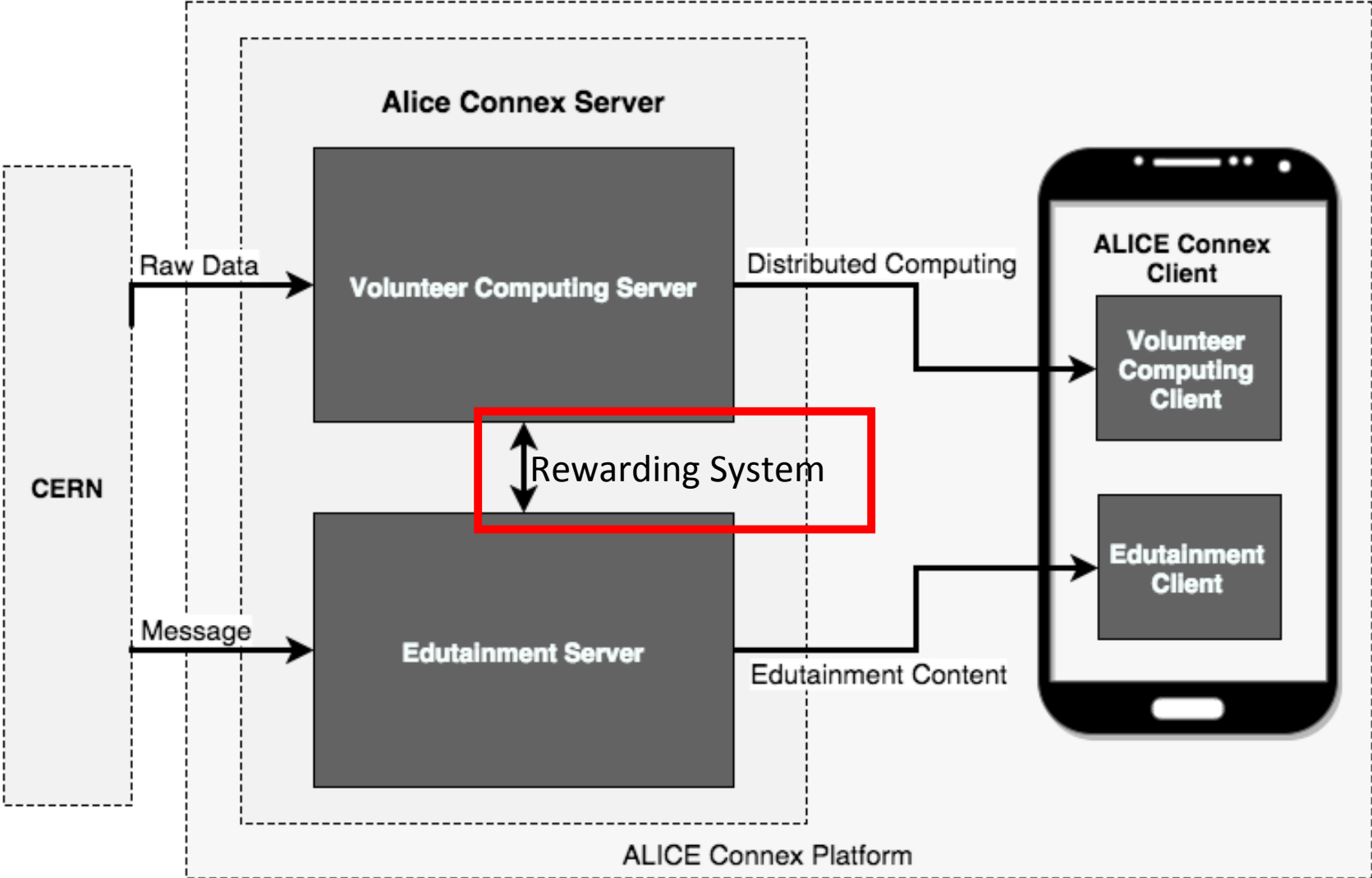
Overall Design of ALICE Connex

Volunteer Computing Platform

Alice Connex Server

Raw Data → **Volunteer Computing Server** → Distributed Computing → ALICE Connex Client — **Volunteer Computing Client**

CERN

Message → Edutainment Server → Edutainment Content → Edutainment Client

ALICE Connex Platform

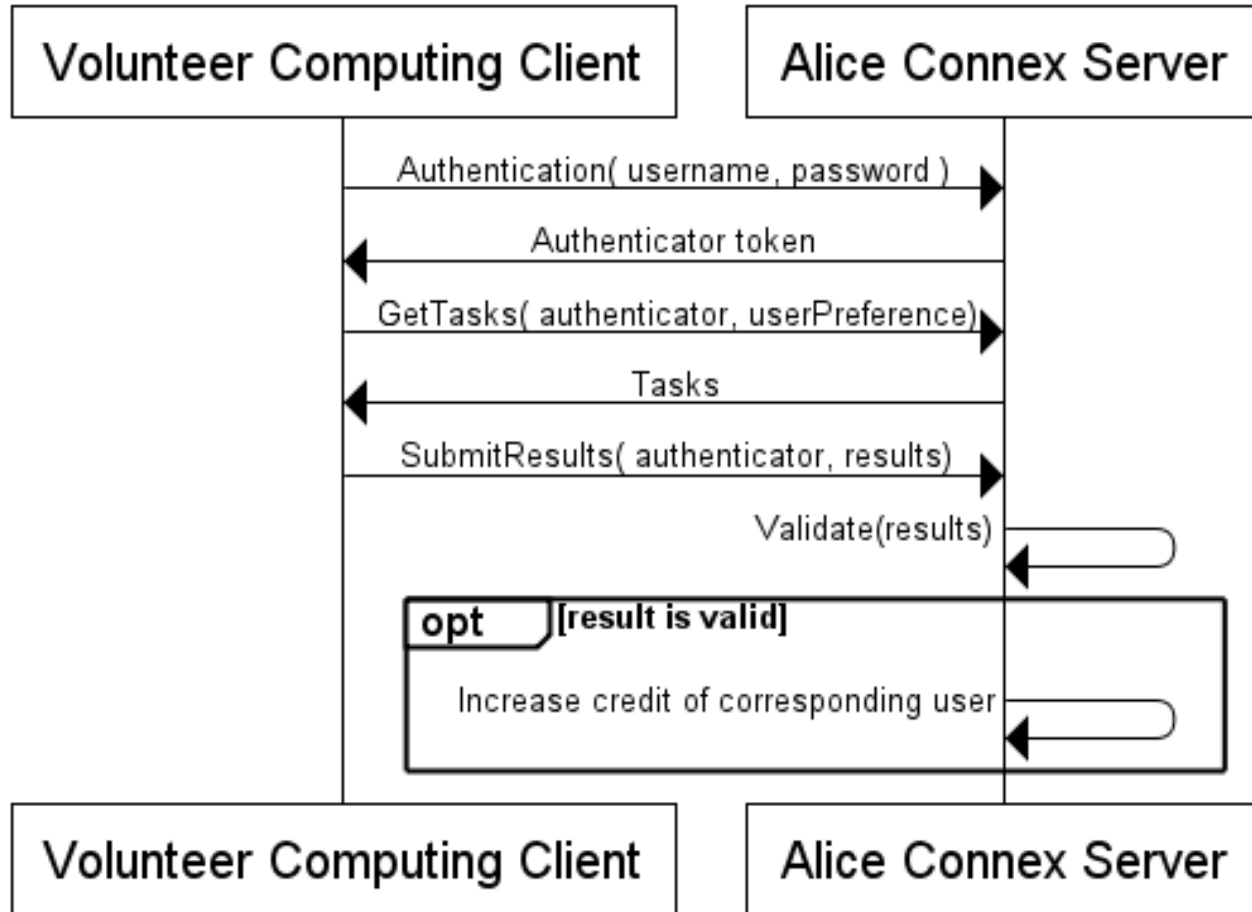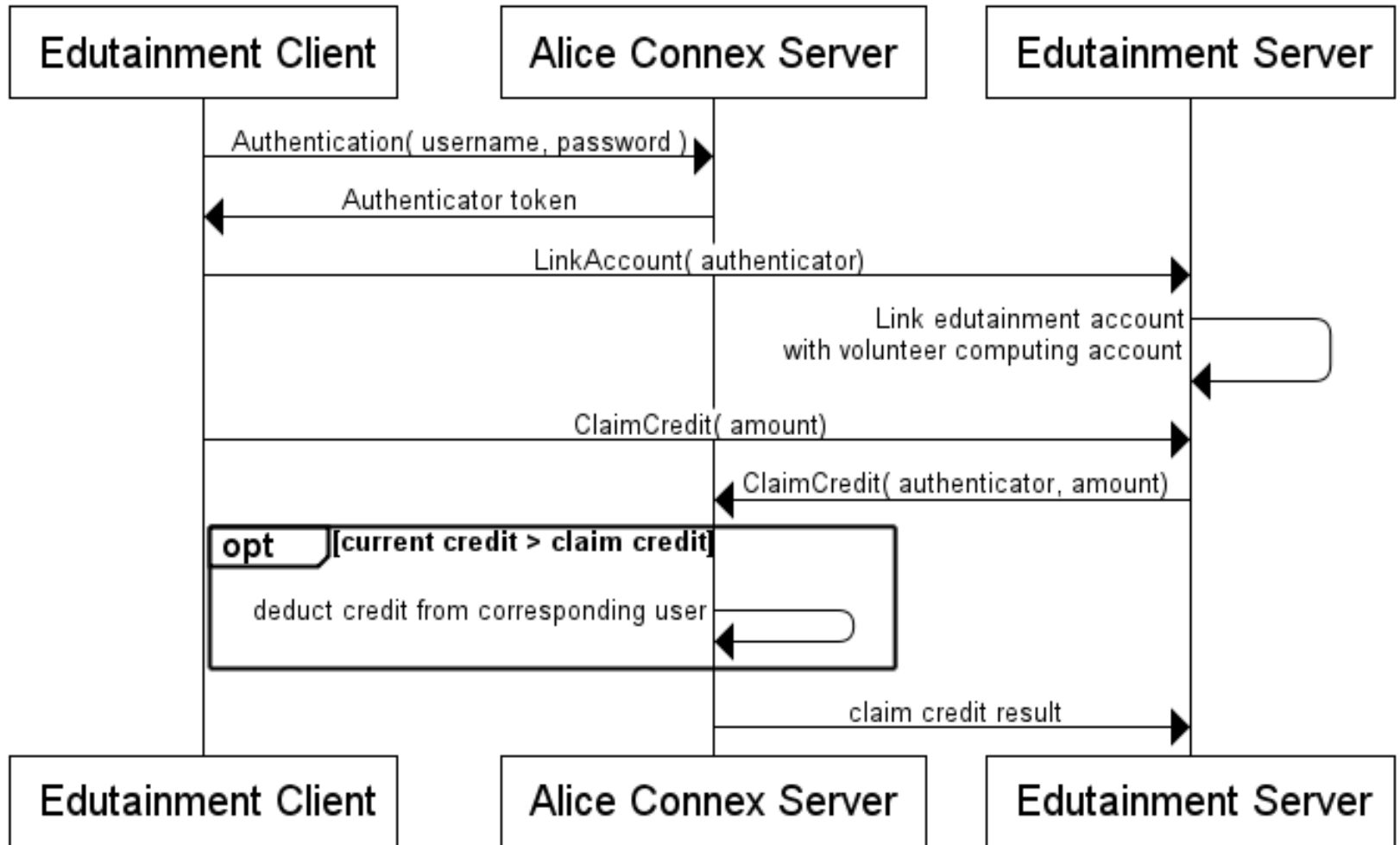# Volunteer Computing Components

Overall Design of ALICE Connex

Overall Design of ALICE Connex

Overall Design of ALICE Connex

Rewarding system
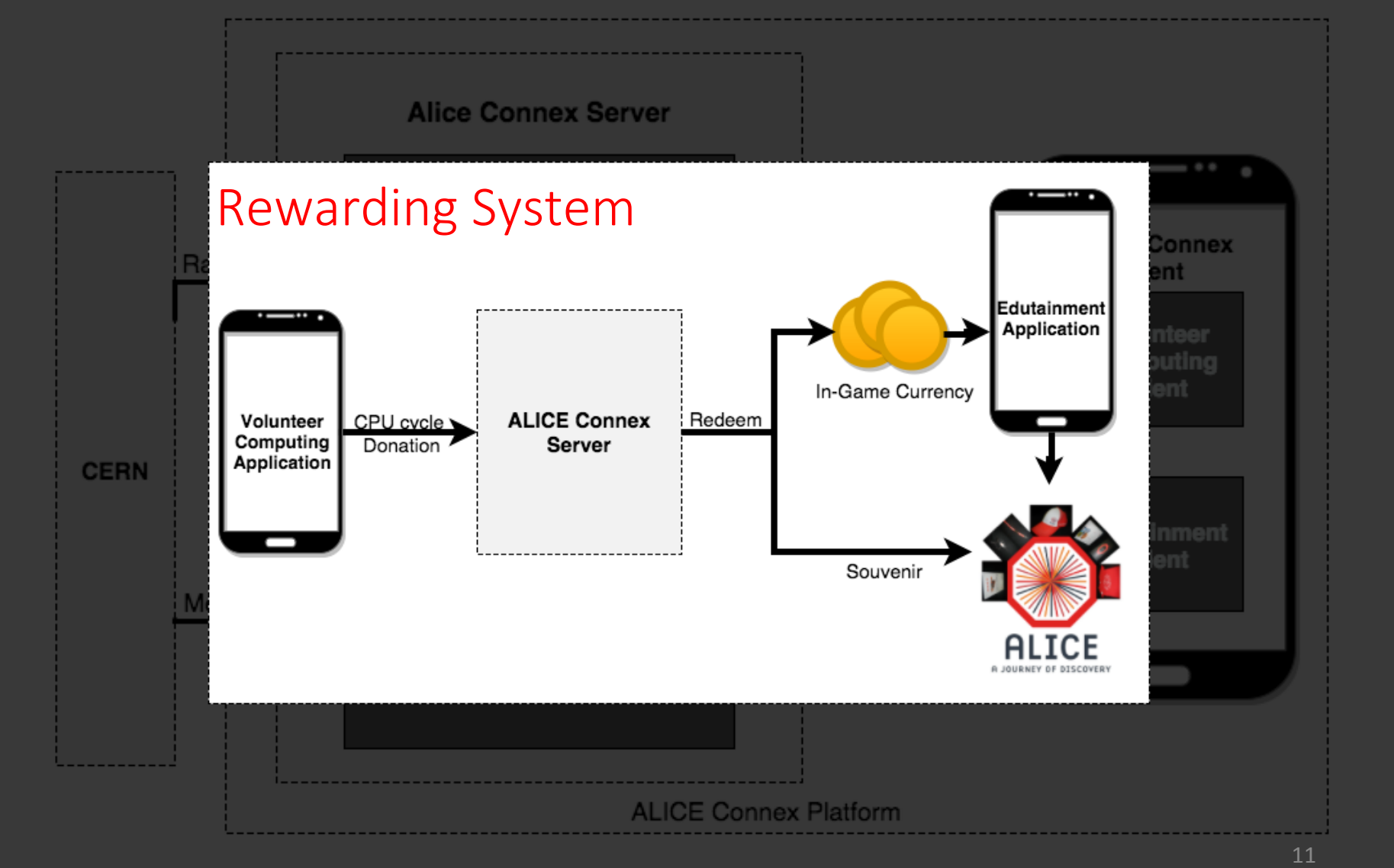
www.websequencediagrams.com
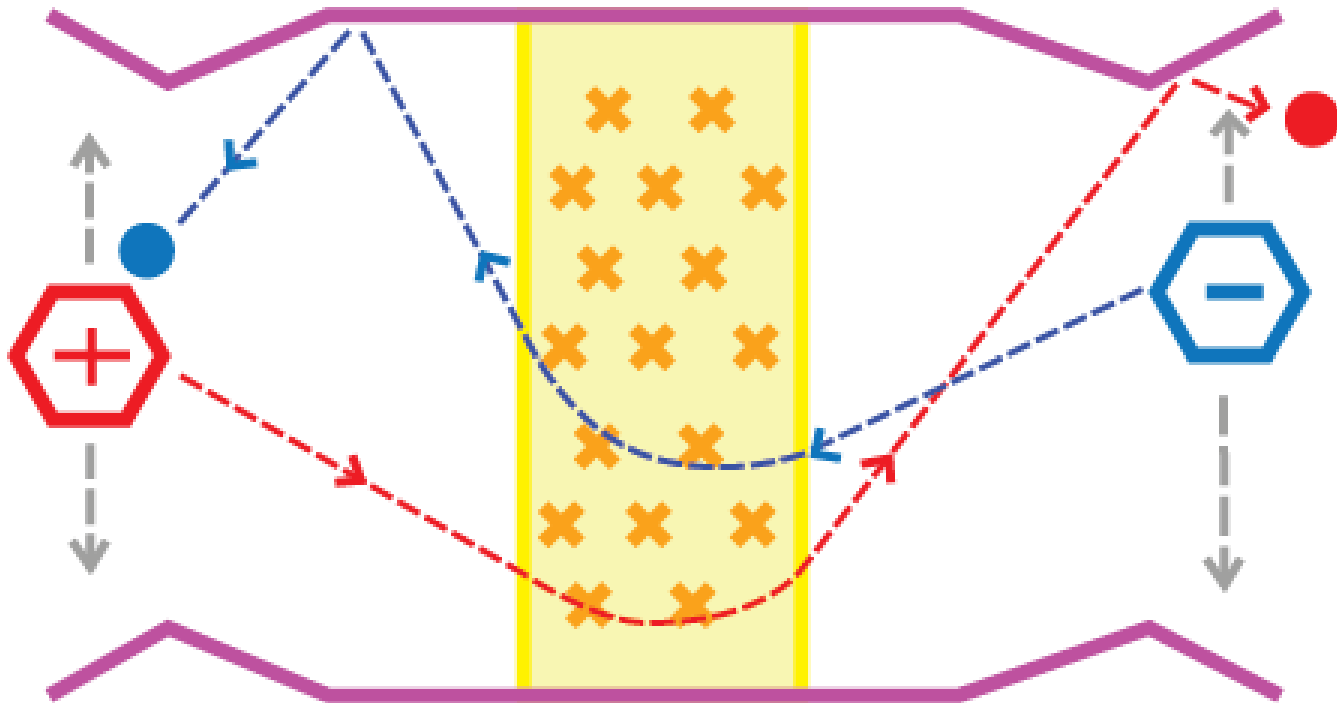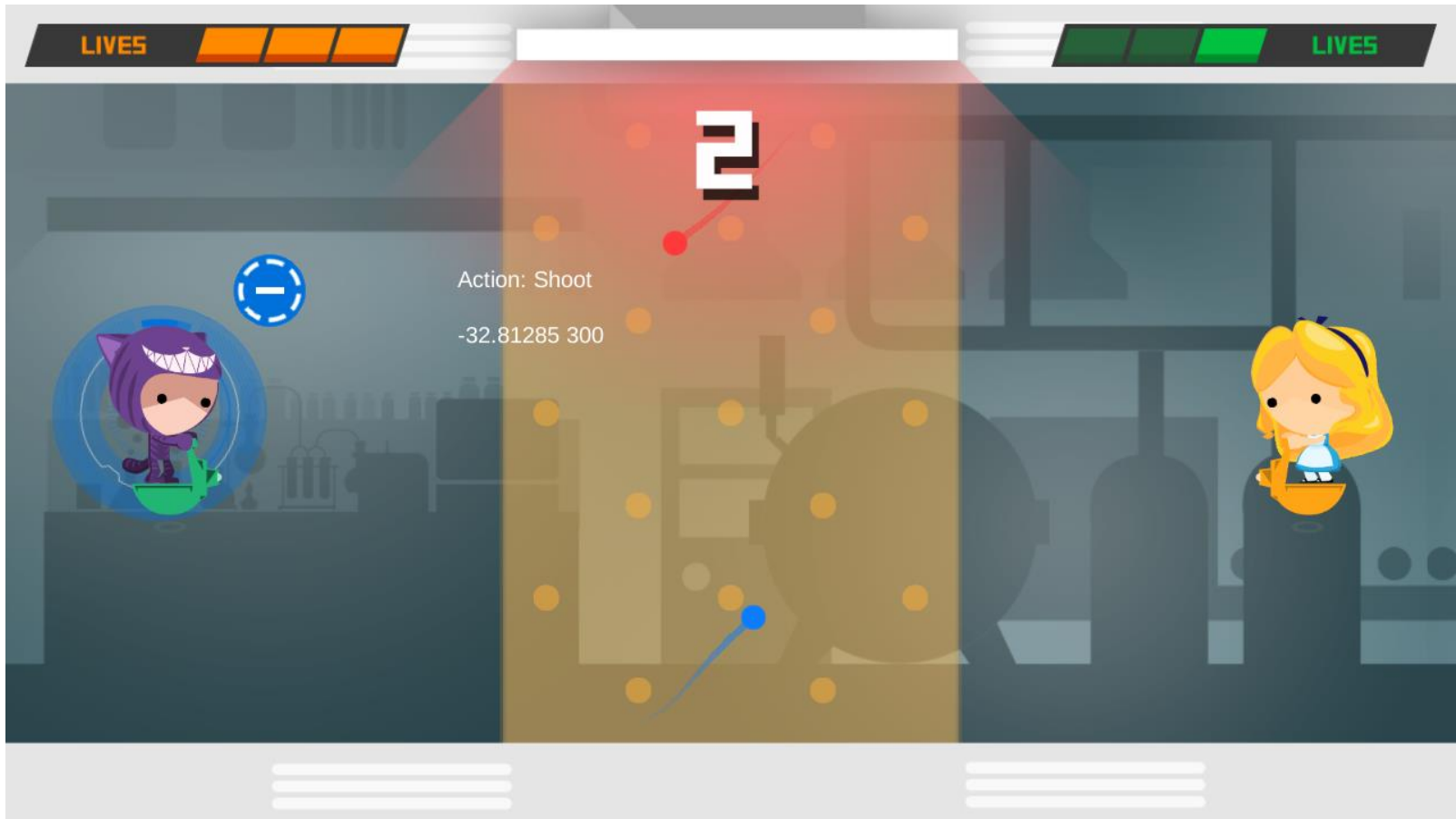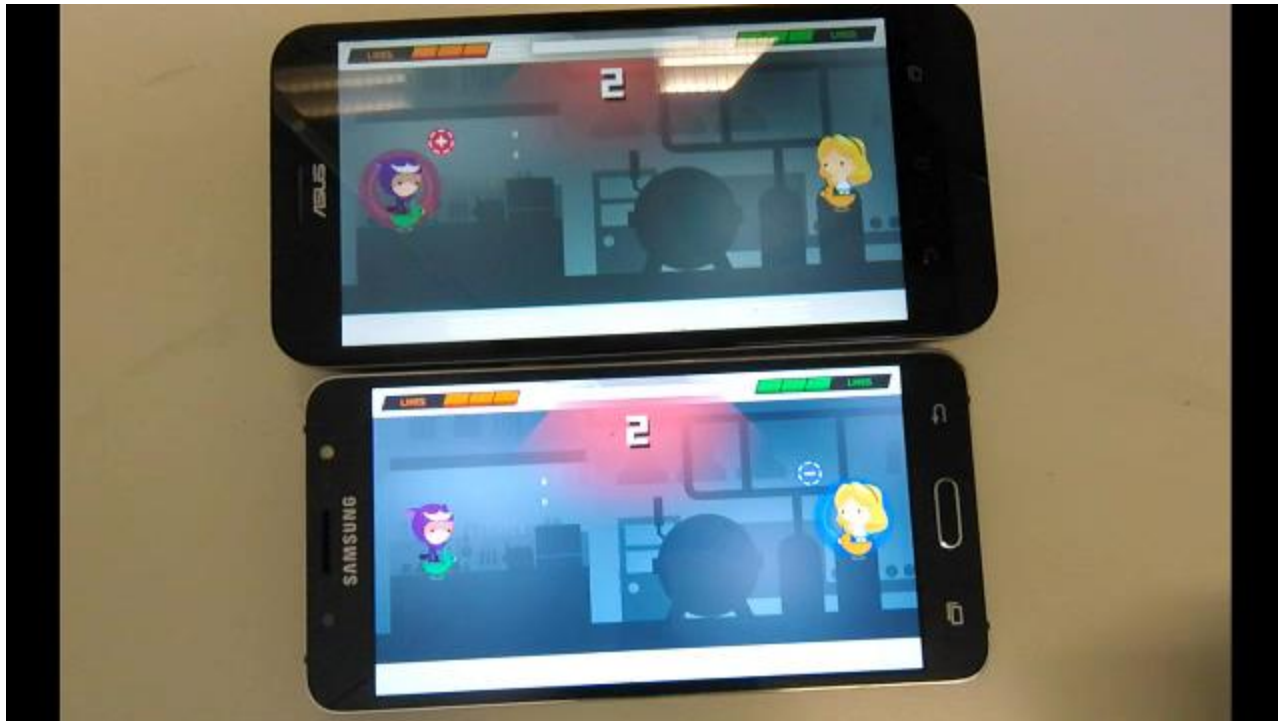
Rewarding system

Edutainment Design

Our Prototype: Particle Shot
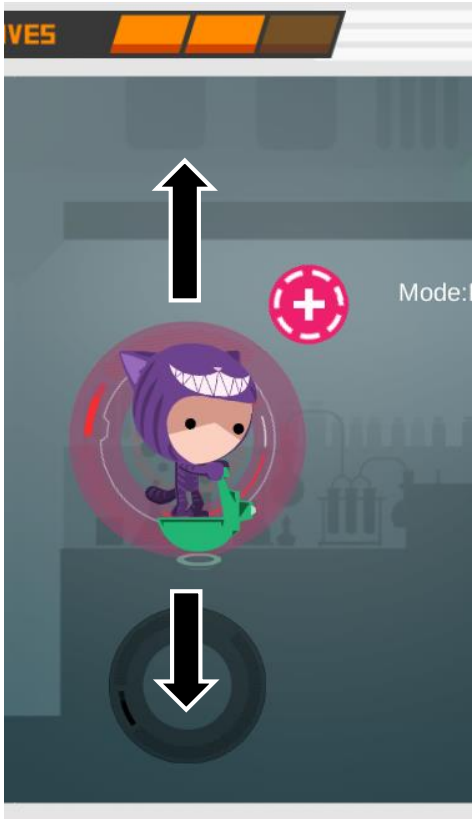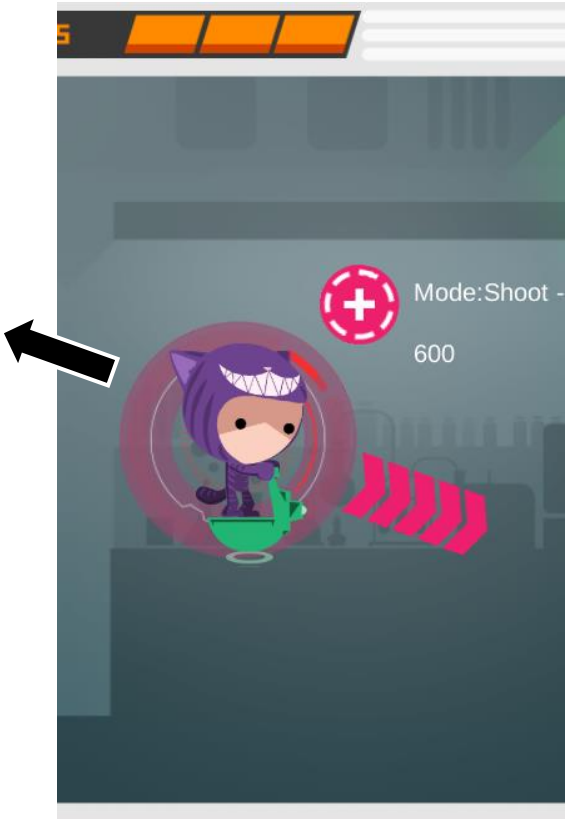
Our Prototype: Particle Shot

Control

Change Charge

Move

Shoot

In Progress

Q&A

Thank you