

# HOU.Polling.App

## Promoting Active Learning using a web-based Audience Response System

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# Introduction

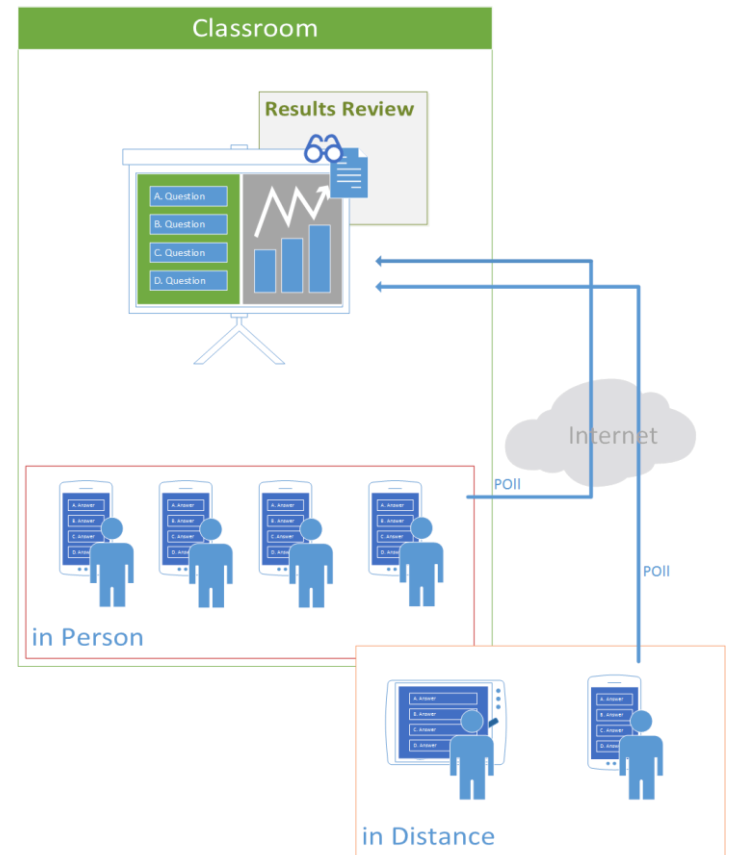
- ▶ Web - based Audience Response System (ARS)
- ▶ Aims to assist the educational process by enhancing students' participation through the Active Learning Model (ALM)
- ▶ Based on open source technologies
  - ▶ No financial effort for the institution
  - ▶ Students use their own hand held devices (BYOD)

# Advantages

- ▶ Real time voting
- ▶ Increase student participation in educational process
- ▶ Anonymity and interaction
- ▶ Immediate and precise results which can lead the educational process
- ▶ Data available in ideal format for further investigation (learning analytics)

# System Architecture & Specs

- ▶ Based on nunchuck.js, a library for mobile web-based control of browser applications
- ▶ Consists of two sub-systems
  - ▶ Controller sub-system
  - ▶ Main Application Engine sub-system
- ▶ Question definition
- ▶ Data visualization

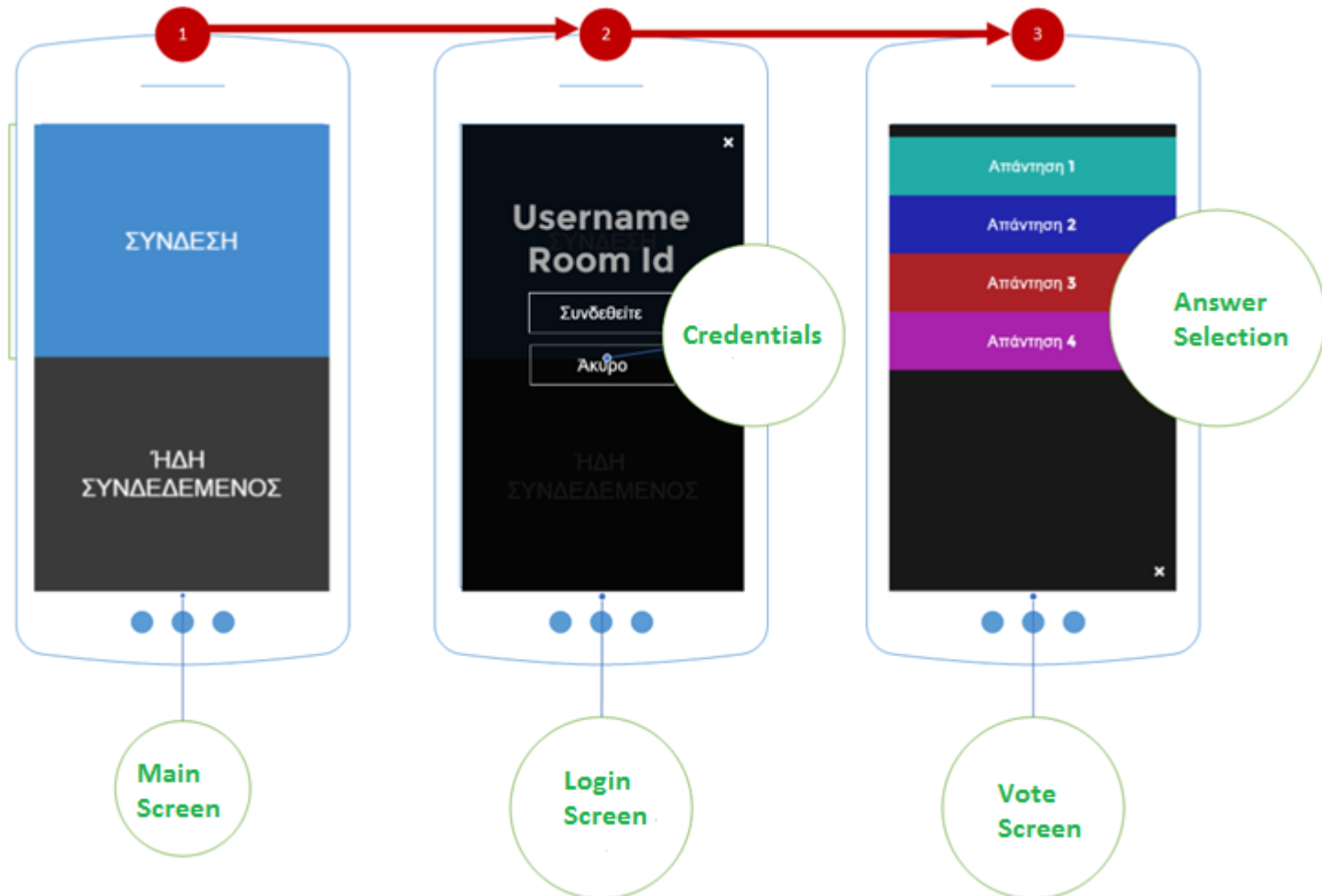


# Main Screens: System's Monitor

Κύρια Οθόνη Συστήματος

The screenshot shows the main interface of the system. On the left, a vertical sidebar contains the logo of the National and Kapodistrian University of Athens and the text "Συνδεδεμένοι: User 01". A yellow circle labeled "Online Users" points to this sidebar. At the top center, a horizontal menu bar contains five icons: a right arrow (1), a person (2), a clock (3), a bar chart (4), and an information icon (5). A yellow circle labeled "Menu" points to this bar. Below the menu is a large white area for questions and answers, with a yellow circle labeled "Question" pointing to the input field. The text in this area includes "Καθορίστε την ερώτησή σας", "Απάντηση 1", "Απάντηση 2", "Απάντηση 3", and "Απάντηση 4". At the bottom center, there is a blue button labeled "Αποθήκευση Ερώτησης". On the right side, a yellow box labeled "Ψήφισαν:" is connected to a yellow circle labeled "Number of votes", which in turn points to a yellow box containing the number "2509". A yellow circle labeled "Room id" points to a yellow box containing the number "2509".

# Main screens - Handheld Devices



# Future Work

- ▶ System evaluation with real students
- ▶ System update & expansion with new capabilities
  - ▶ A priori preparation of questions (not on demand)
  - ▶ Questions can be defined by students (not only by tutors)
  - ▶ Word clouds
  - ▶ Data analysis mechanism
  - ▶ Event logs



Thank you!

Any questions?