

CSCE 4561

# Cliquer

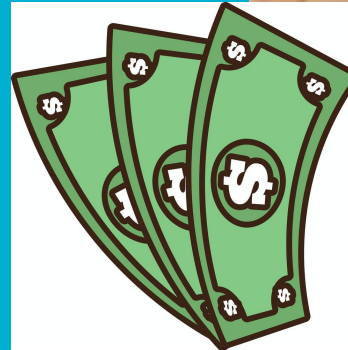
---

Presented by: Brianna Ciora, Walter Dane, Lori de Boer,  
Brittney Pham, and Phillip Boudreau

# Problem

---

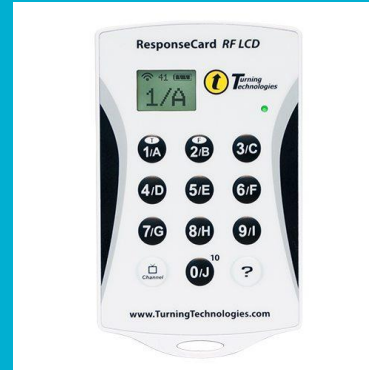
- Professors encourage student engagement in class through the use of clickers
  - Attendance
  - Quizzes
- Clickers cost \$82.99
- Clickers have very basic functionality
  - Multiple choice
  - Fixed Polls
- Students forget to bring clickers to class
- Academic Integrity
  - Students checking in for one another



# Related Technology

---

- TurningPoint Technologies
  - Used at the UofA
- iClicker
  - GPS tracking
  - Short answer responses
- The main reason ours will be different
  - It will be free



# Facilities and Equipment

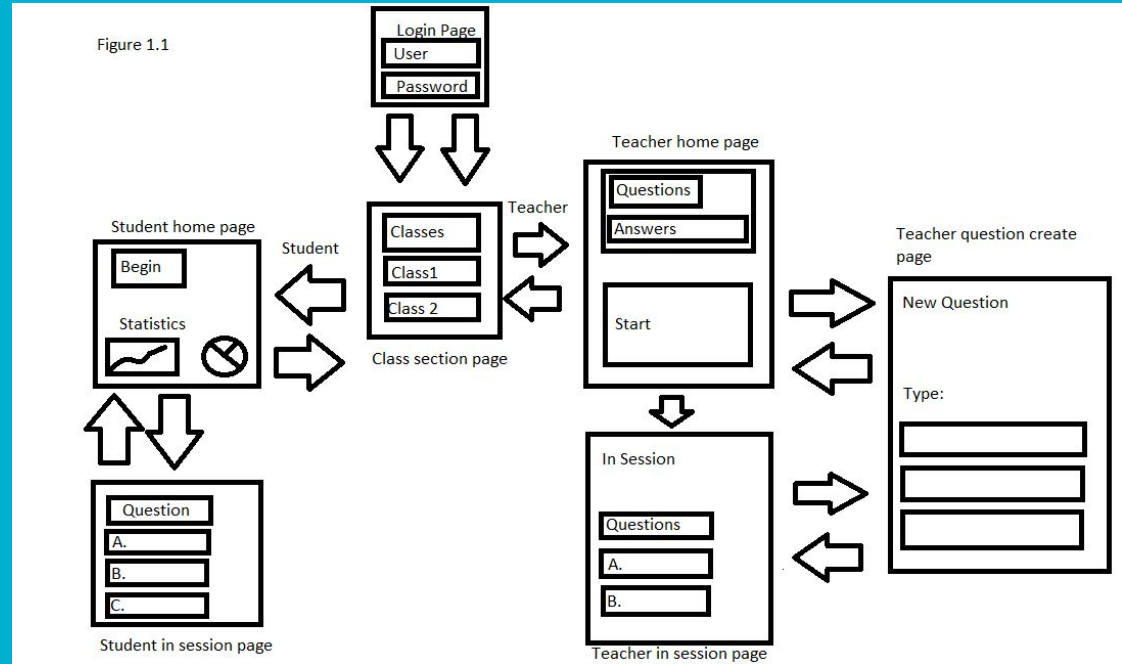
---

- No facilities required
- Attendance/answer inputs are stored in the application
- Required equipment
  - Smartphone
- Required accesses
  - Internet
  - Play Store



# Technology Used and Architecture

1. Firebase Database
2. Java
3. Android Studio
4. Google Play



# Actual Database

clicker-87b6d

Courses

433984011

courseId: "FLOR5081"  
courseName: "Floral Enterprises"  
teacher: "John Smith"

556091797

courseId: "TEST1234"  
courseName: "Test Course"  
teacher: "Allen Coke"

633396277

665379739

720716089

739065785

798687538

864863084

885201927

Sessions

Students

Teachers

Students

as

jw

CourseIDs

556091797: "556091797"  
730883293: "730883293"  
739065785: "739065785"

emailAddress: "jw@uark.edu"  
firstName: "John"  
lastName: "Whittaker"

th

Teachers

ac

jsmith

pb

CourseIDs

720716089: "720716089"  
730883293: "730883293"  
739065785: "739065785"  
798687538: "798687538"  
816378226: "816378226"  
864863084: "864863084"  
885201927: "885201927"

emailAddress: "pb@uark.edu"  
firstName: "Phillip"  
lastName: "Boudreau"

Sessions

730883293

Questions

How many ounces are in 1 lb?

AnswerMap

0: "false"  
10: "false"  
16: "true"  
50: "false"

isActive: false  
numResponses: 0  
questionText: "How many ounces are in 1 lb?"

How tall is the Empire State Building?

What characters are not allowed in a Firebase key?

What is the temperature today?

Where is the moon located?

Why can't you have a scrollview filled with edittexts?

Responses

jw

How many ounces are in 1 lb?: "16"  
What is the temperature today?: "0 degrees"

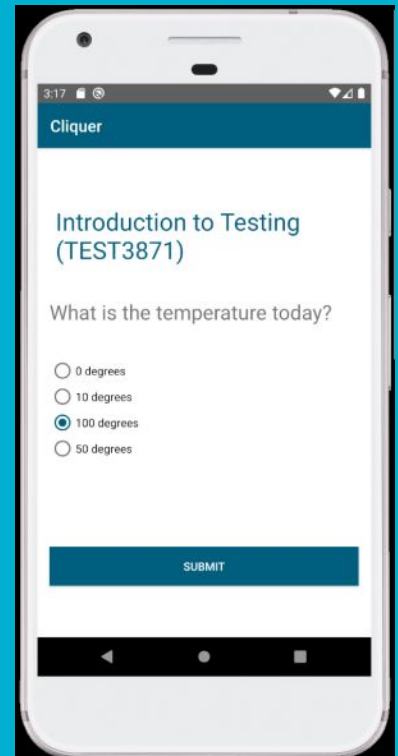
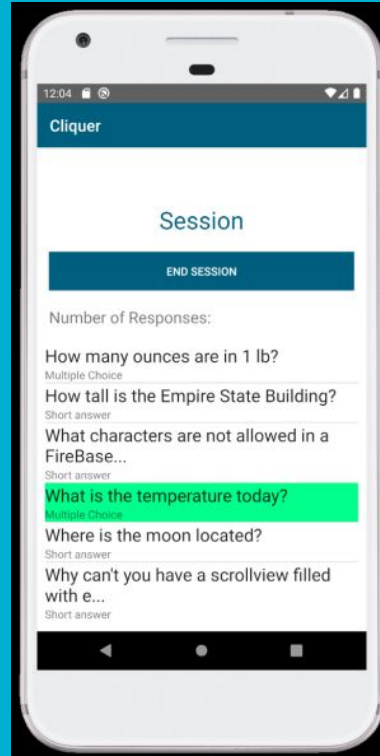
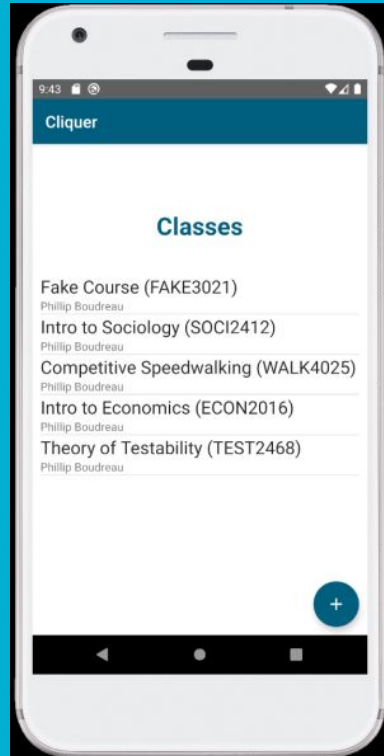
active: true

course

courseId: "TEST3871"  
courseName: "Introduction to Testin"  
teacher: "Phillip Boudreau"

816378226

# Actual Architecture



# Features

---

- Functionality for both teachers and students to sign up
- Instructors can create classes and students can register for classes
- Instructors can create multiple choice questions or short answer questions before class or create them on the go and students can answer the teacher's questions
- An easy to use and minimal user interface
- Free platform with easy management



# Challenges

---

# Conclusion

---

- Our application has many benefits
  - Easy to use
  - Easy to manage
- Future work
  - GPS tracking
  - More question formats such as fill in the blank, open response, etc
  - Statistics
  - Post to app store, make it native to iOS