

# Computerized Application for Paper-less Examination Screening system for Recruitment

**Smart India Hackathon 2018**  
**30-31 March 2018**



# Problems faced by Job Seekers



# Problems faced by Job Seekers

- ▶ Time, funds, different exam centers



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- ▶ Time, funds, different exam centers
- ▶ Strikes / Bandh



# Problems faced by Job Seekers

- ▶ Time, funds, different exam centers
- ▶ Strikes / Bandh
- ▶ Unaffordable, Non-availability of transportation



# Problems faced by Recruiters



# Problems faced by Recruiters

- ▶ **Selecting examination centers, supervisors, invigilators**



# Problems faced by Recruiters

- ▶ **Selecting examination centers, supervisors, invigilators**
- ▶ **Transportation, security of question papers, answer sheets**





# Problems faced by Recruiters

- ▶ Selecting examination centers, supervisors, invigilators
- ▶ Transportation, security of question papers, answer sheets
- ▶ Paper leak, re-examination



# Proposed Solution : CAPES



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- ▶ **Computerized Application for Paper-less Examination Screening (CAPES) system for recruitment**



# Proposed Solution : CAPES

- ▶ **Computerized Application for Paper-less Examination Screening (CAPES) system for recruitment**
- ▶ **Examination as web based centrally controlled software solution**



# Proposed Solution : CAPES

- ▶ **Computerized Application for Paper-less Examination Screening (CAPES) system for recruitment**
- ▶ **Examination as web based centrally controlled software solution**
- ▶ **Mobile application**



# Solution Architecture



# Solution Architecture

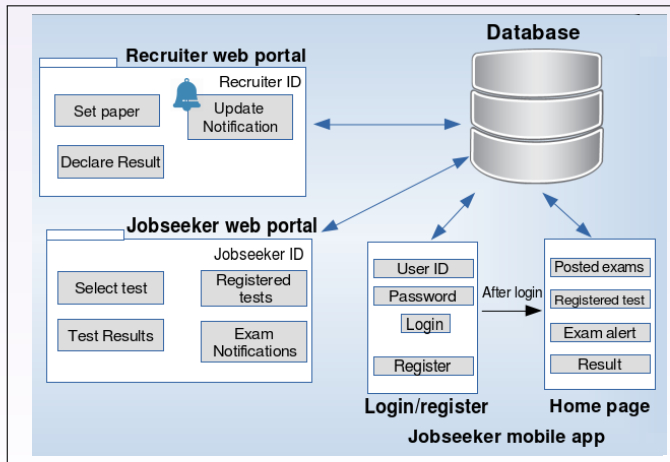


Figure: CAPES Architecture



# Technology





# Technology

- **Bootstrap, JSON, AJAX, JQuery**



# Technology

- ▶ Bootstrap, JSON, AJAX, JQuery
- ▶ PHP, MySQL



# Technology

- ▶ Bootstrap, JSON, AJAX, JQuery
- ▶ PHP, MySQL
- ▶ XML, Java



# Security



# Security

- Face and keystroke recognition



# Security

- ▶ Face and keystroke recognition
- ▶ One window



# Security

- ▶ Face and keystroke recognition
- ▶ One window
- ▶ E-mail, One Time Password



# Security

- ▶ Face and keystroke recognition
- ▶ One window
- ▶ E-mail, One Time Password
- ▶ **Answers in Encrypted format**





# Suggestions from Round 1



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- **Difficulty level, time for questions**



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- ▶ **Difficulty level, time for questions**
- ▶ **JSON**



# Suggestions from Round 1

- ▶ **Difficulty level, time for questions**
- ▶ **JSON**
- ▶ **AJAX, JQuery**



# Suggestions from Round 1

- ▶ Difficulty level, time for questions
- ▶ JSON
- ▶ AJAX, JQuery
- ▶ Browser dependencies, Chrome, Firefox, Opera, Safari, Edge



# Suggestions from Round 2



# Suggestions from Round 2

- **Security features**



# Additional Features





# Additional Features

- Recognise face, flag inconsistency



# Additional Features

- ▶ Recognise face, flag inconsistency
- ▶ User recognition through Keystrokes

