Australian National University

INTERACTIVE MOBILE INTERFACE FOR VIDEO BROWSING

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BACKGROUND

What is a video? Why youtube?

Frames seen when hovering through the youtube video timeline

BACKGROUND

How does a user conventionally search a video?

Through metadata

- [Video Title]
- [Video Tags]
- [Video description]
- [Producer]
- [Upload Date]
- …

Drawbacks…

INEFFICIENCIES/ DRAWBACKS

Case 1 (incorrect metadata):

Search Term: ‘Playstation 3’

INEFFICIENCIES/ DRAWBACKS

Case 2 (Incomplete Metadata):

Only lists 'Golden Voice' video in description

PROPOSED SOLUTION

What if you could search videos independent of its metadata?

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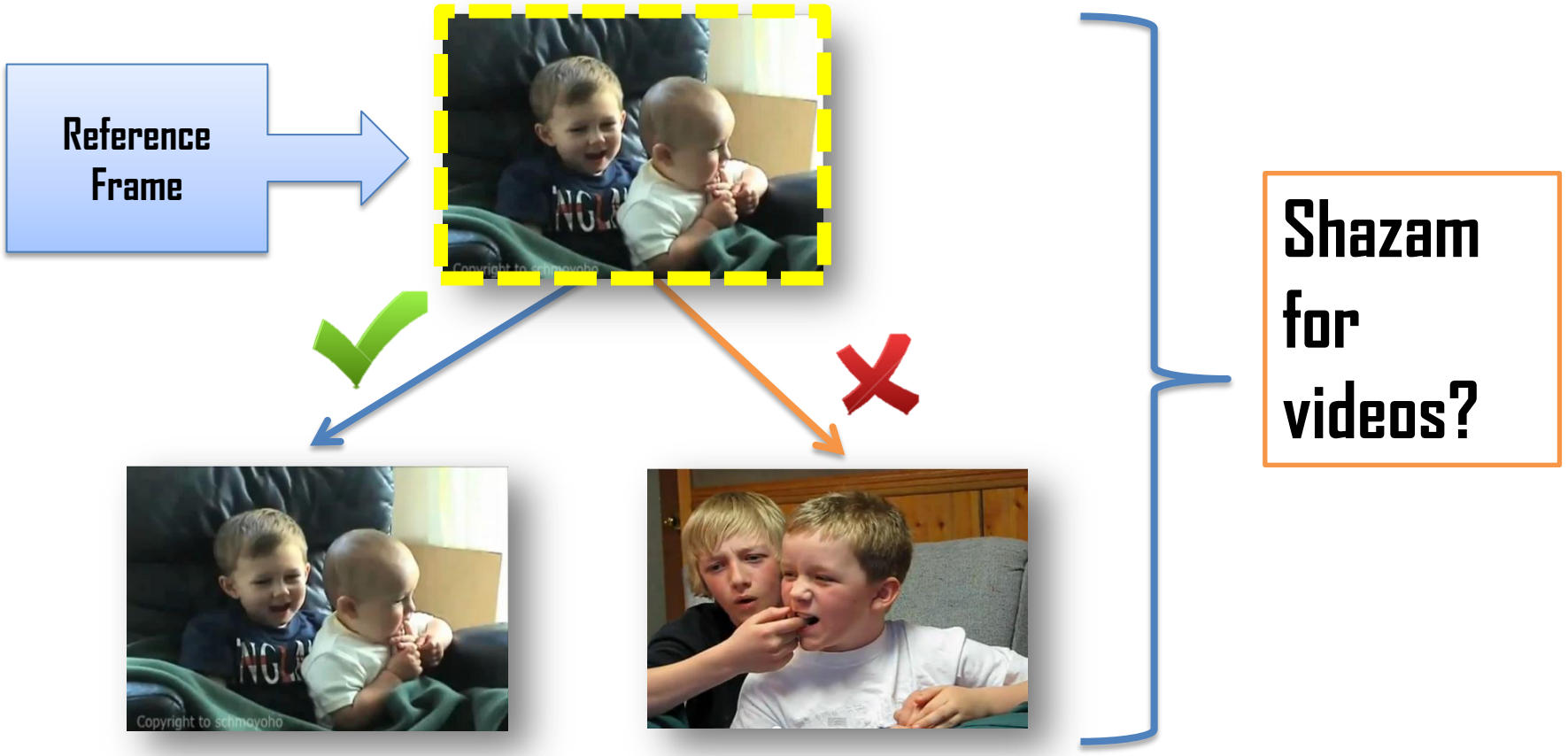


GOAL AND SCOPE

Goal:

Provide a new platform to utilise available visual meme-tracking tools

Scope:

Develop an Android application and create the backend (server) system for utilising available meme-tracking tools on cantabile server

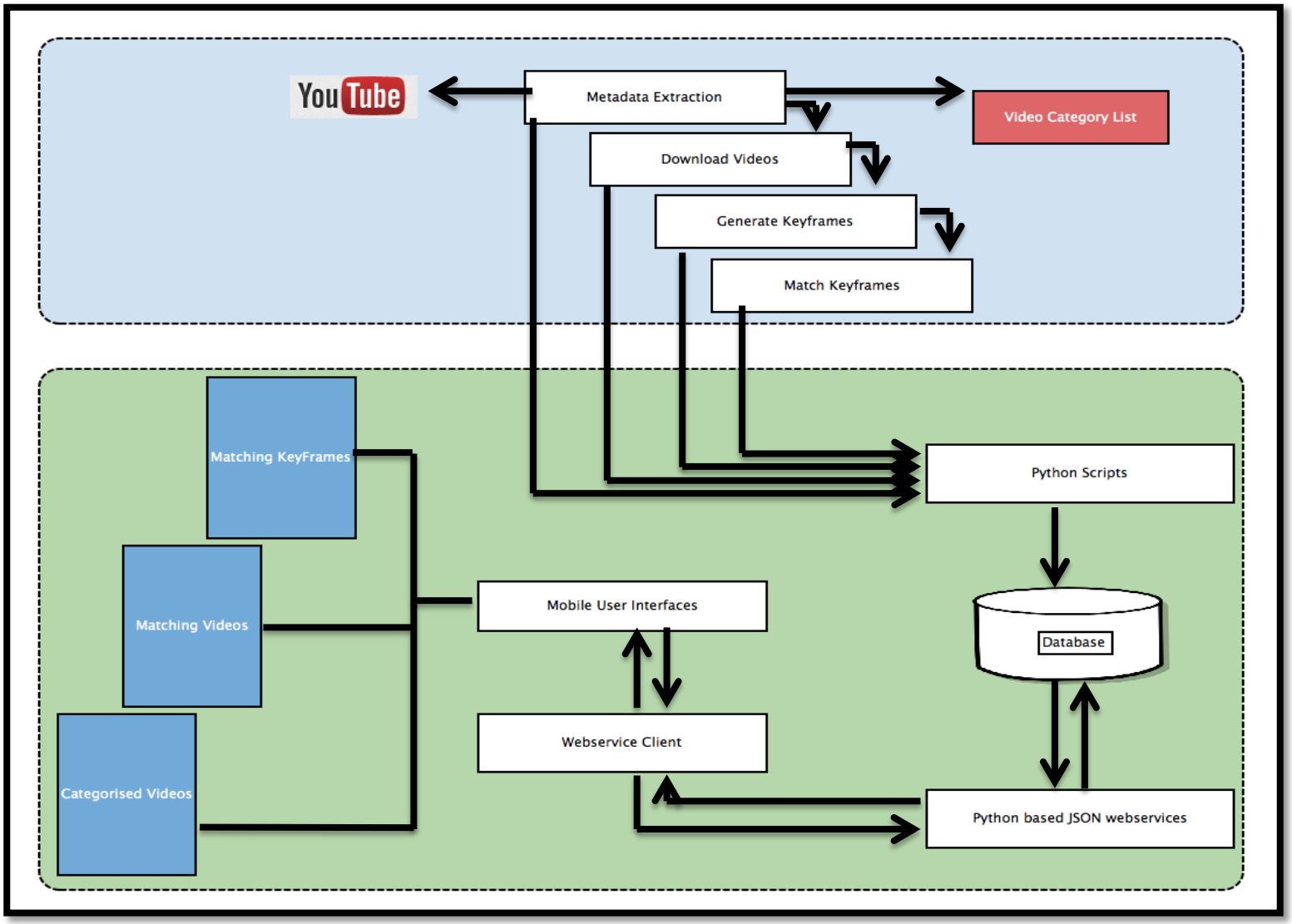
WHY SMARTPHONE APP...

Information on demand

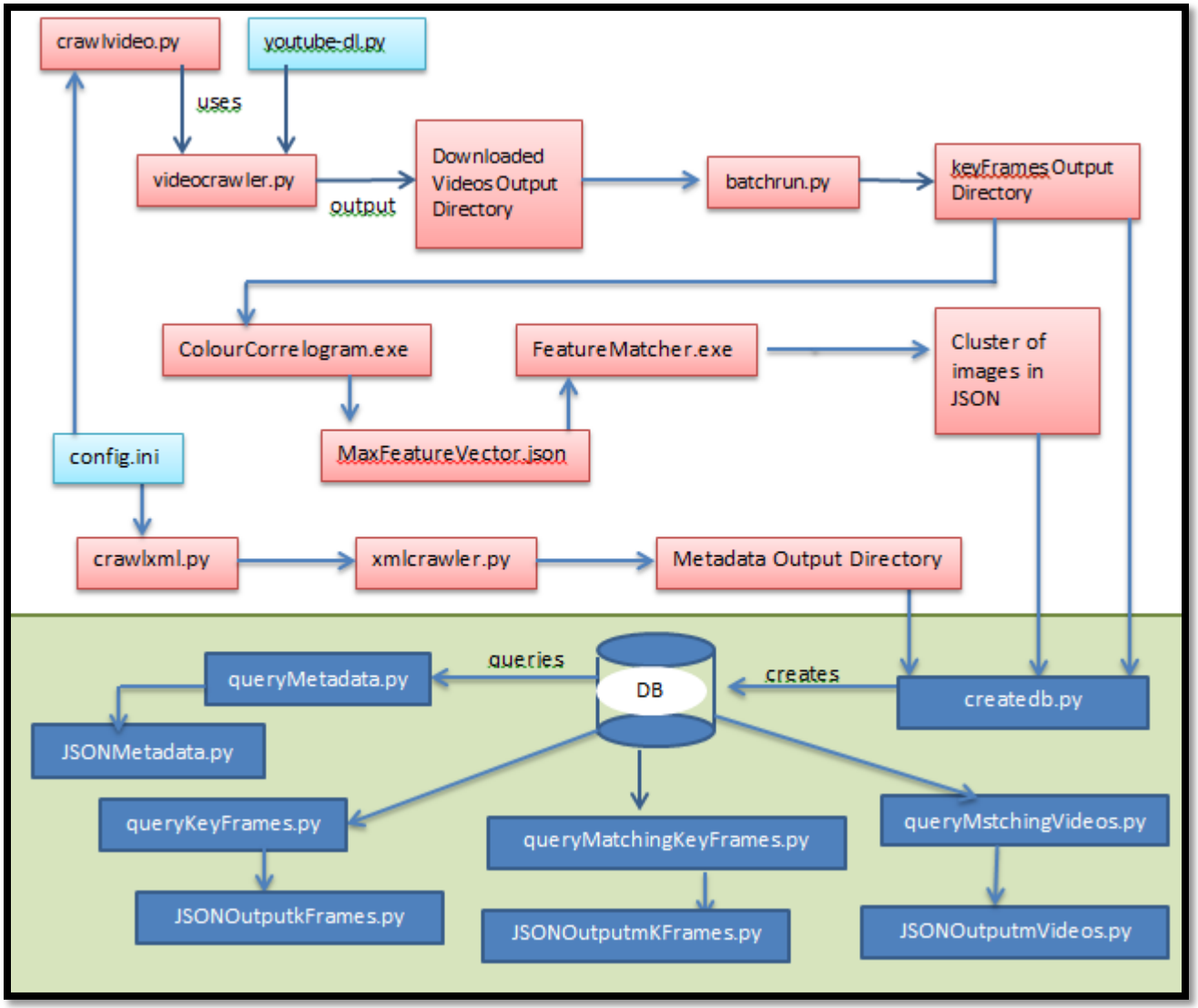
Collection of statistics/feedback from users and their devices

Increase usage

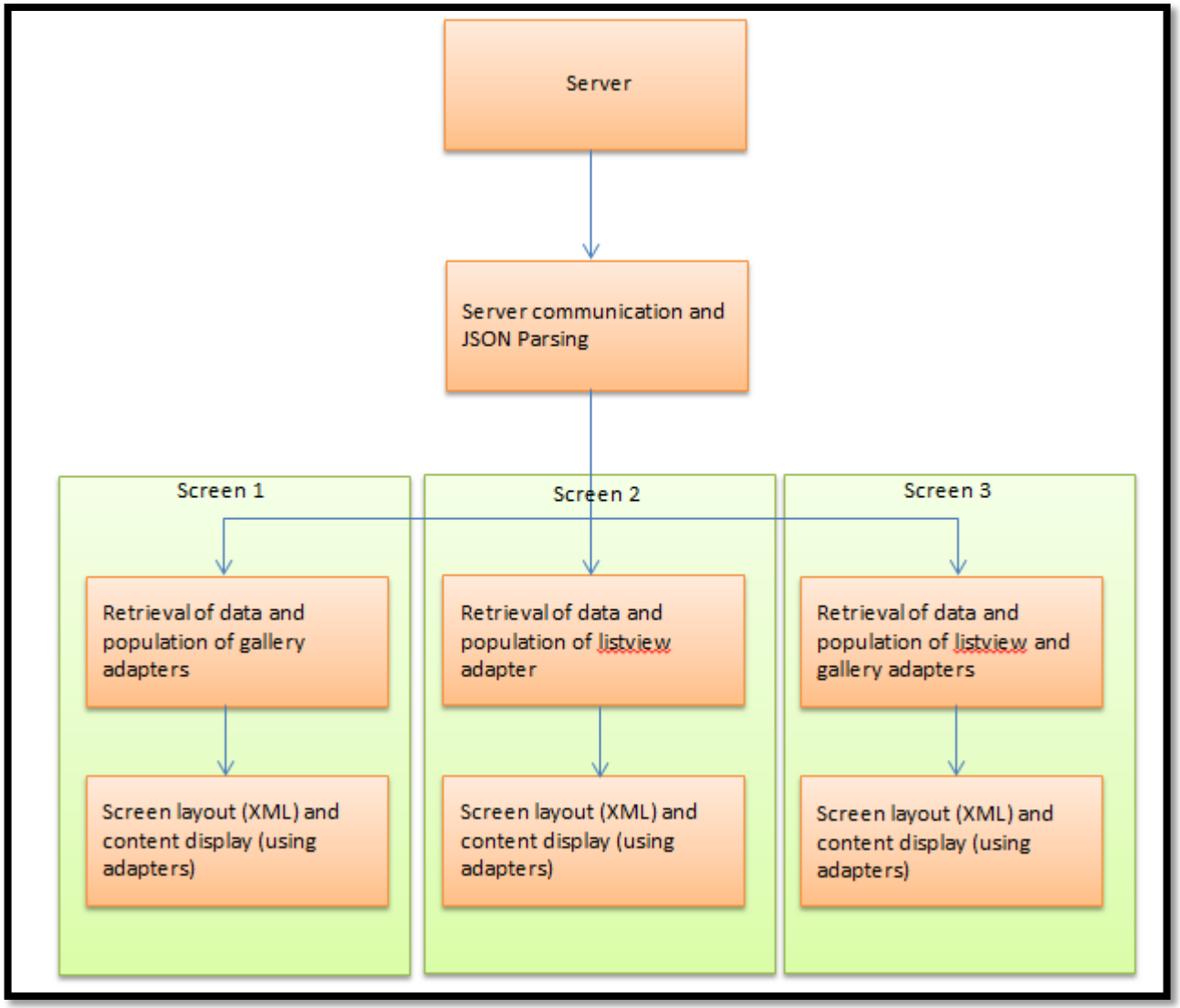
SYSTEM OVERVIEW (High level design)



LOW LEVEL DESIGN (Server)



LOW LEVEL DESIGN (Android)



APP REQUIREMENTS

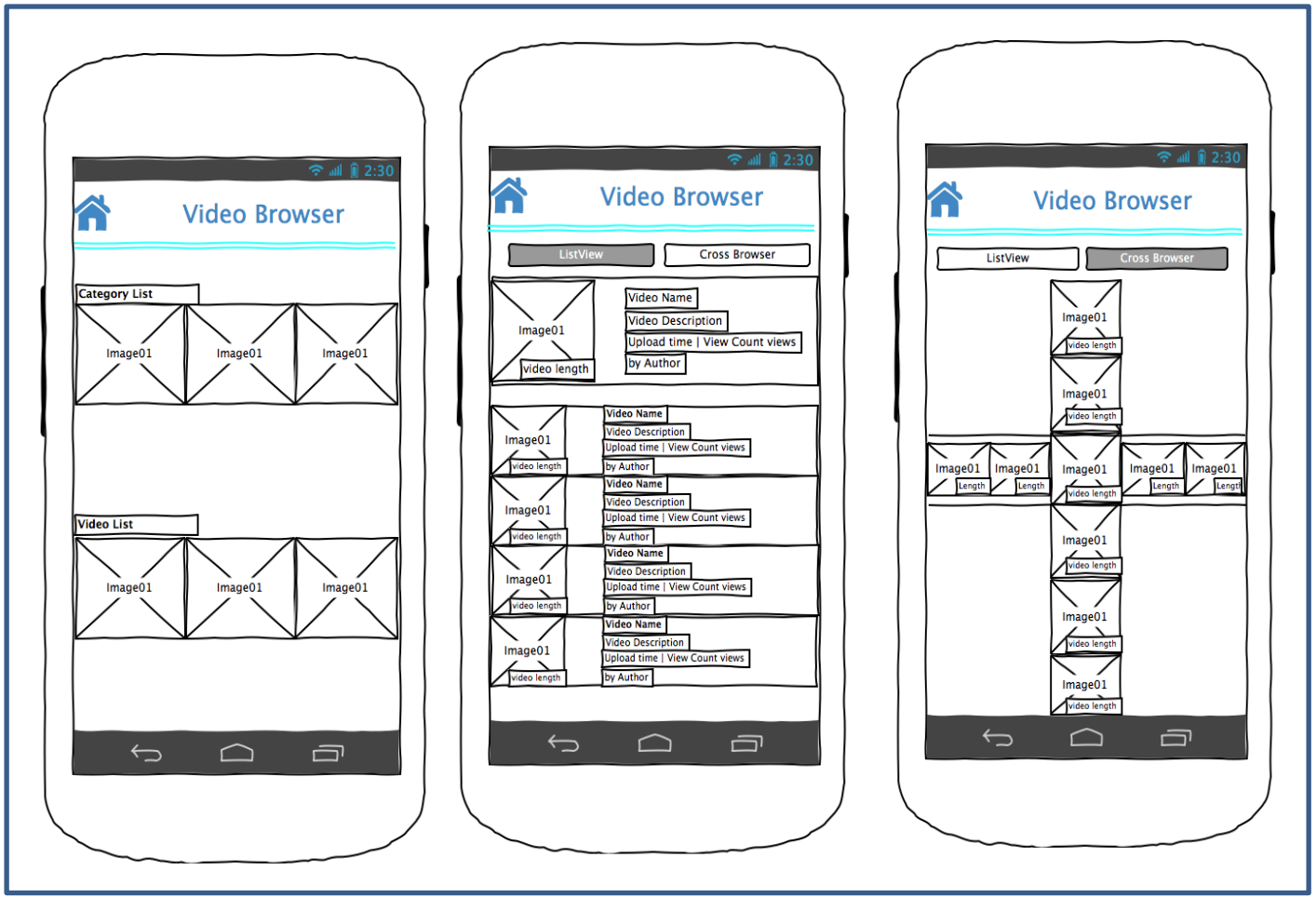
User Interface

- Colour Scheme
- Positioning of Buttons
- Cater for different screen sizes, firmware releases etc.
- Unified app design that can be easily recreated for iPhones, tablets etc.
- Efficient screen usage (minimisation of screens etc.)

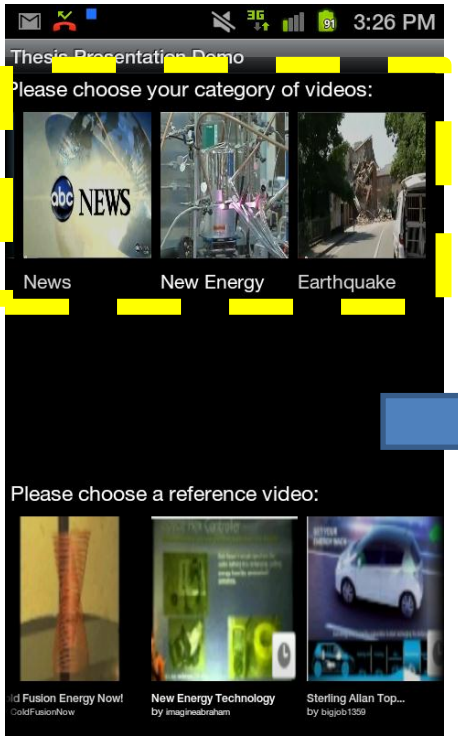
Responsiveness and Robustness of the app

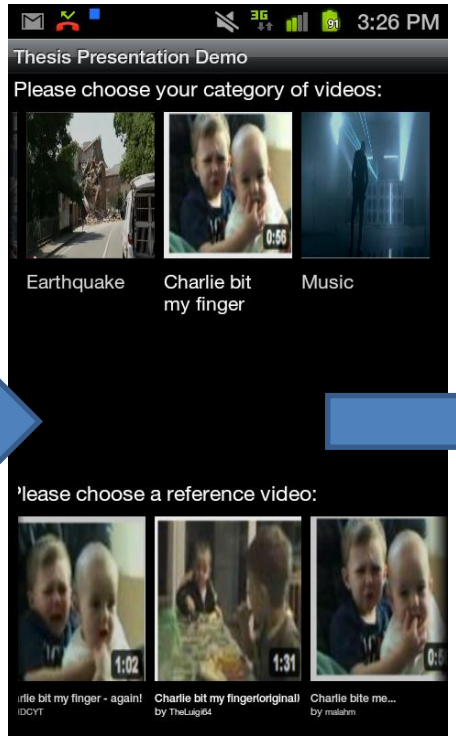
- Minimise, if not eliminate, unexpected crashing of the app
- Locally store (cache) data for enhanced browsing experience

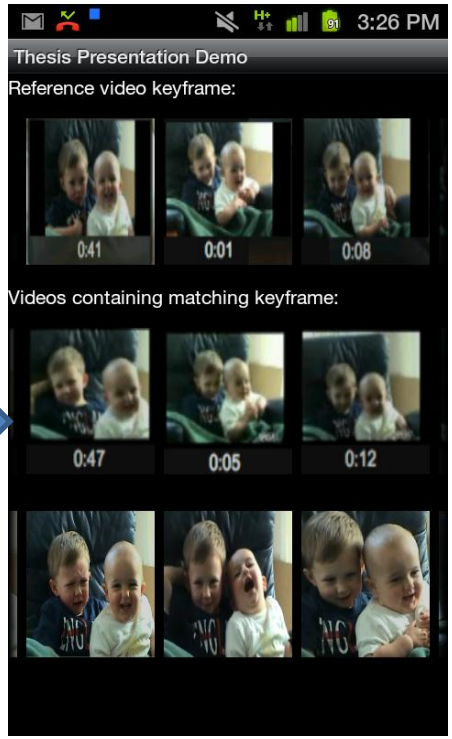
SCREEN MOCKUPS (Iteration 1)



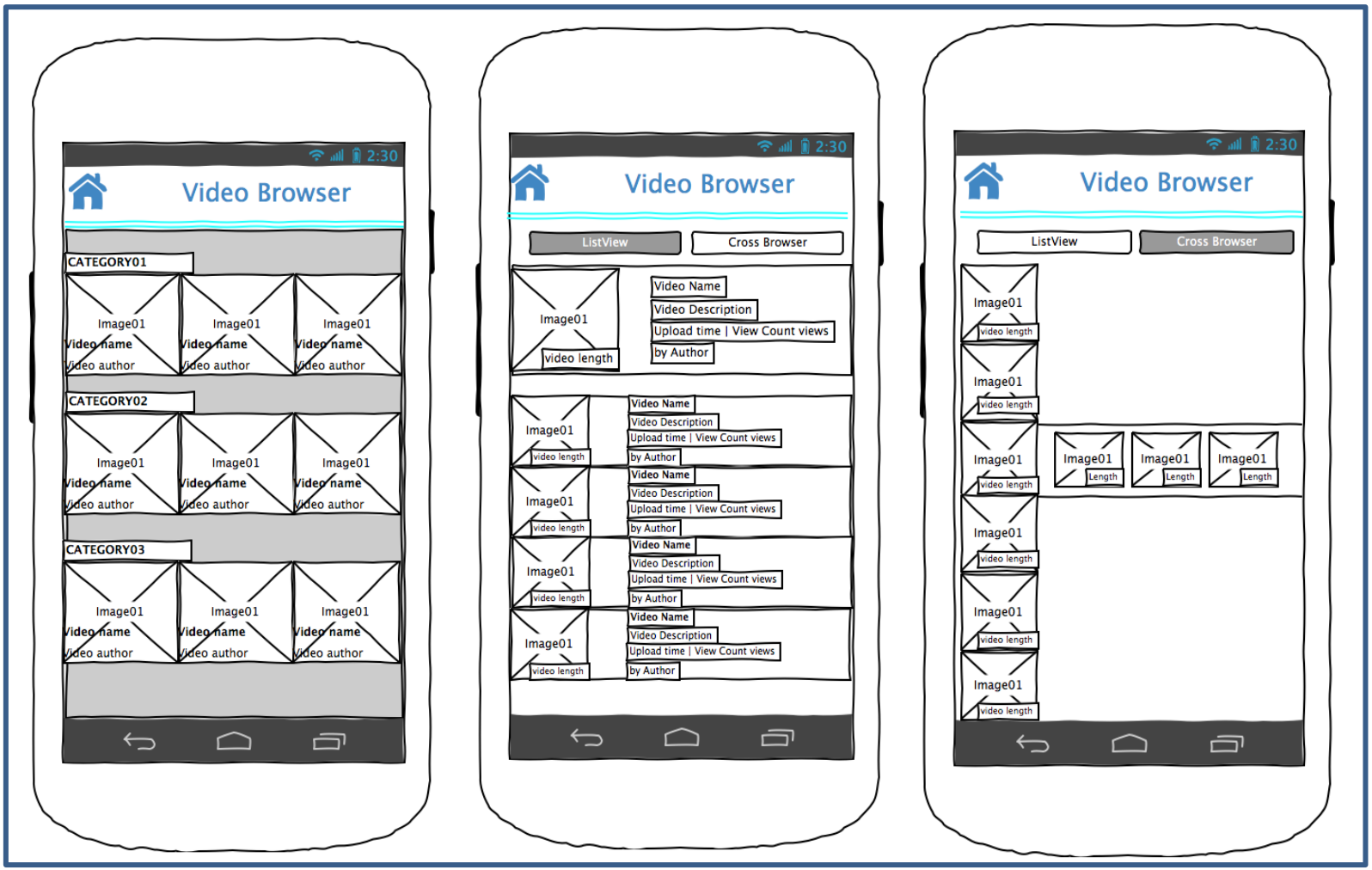
SCREENSHOTS (Version 1)



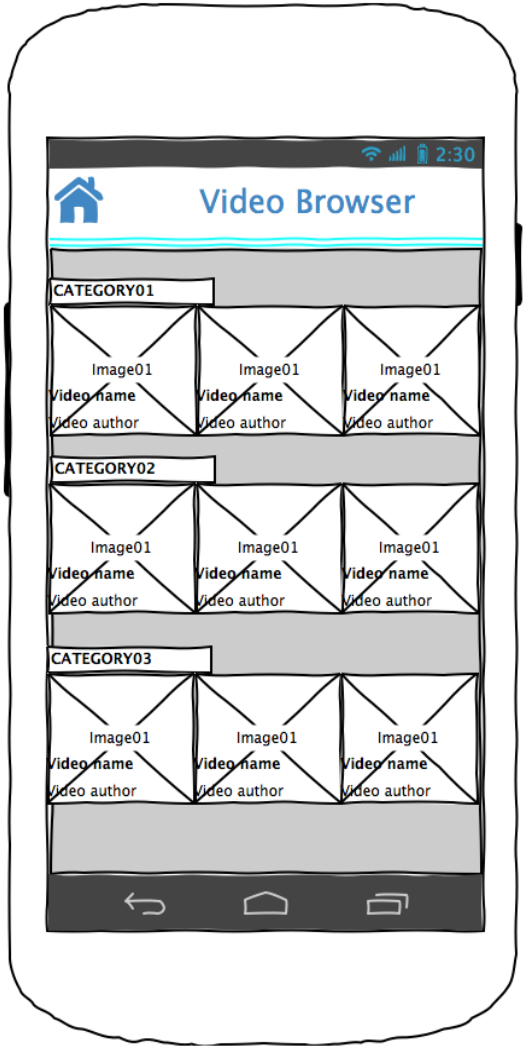


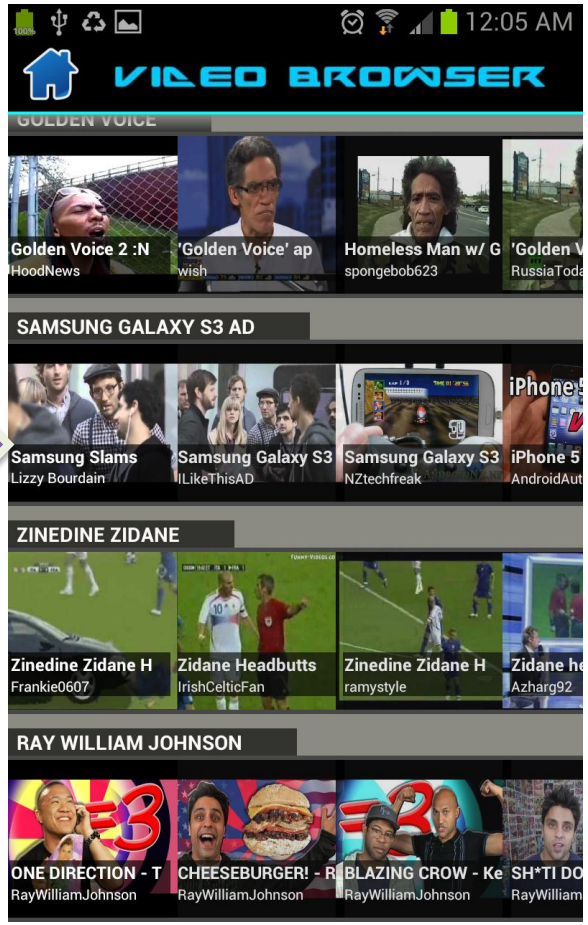


SCREEN MOCKUPS (Iteration 2)

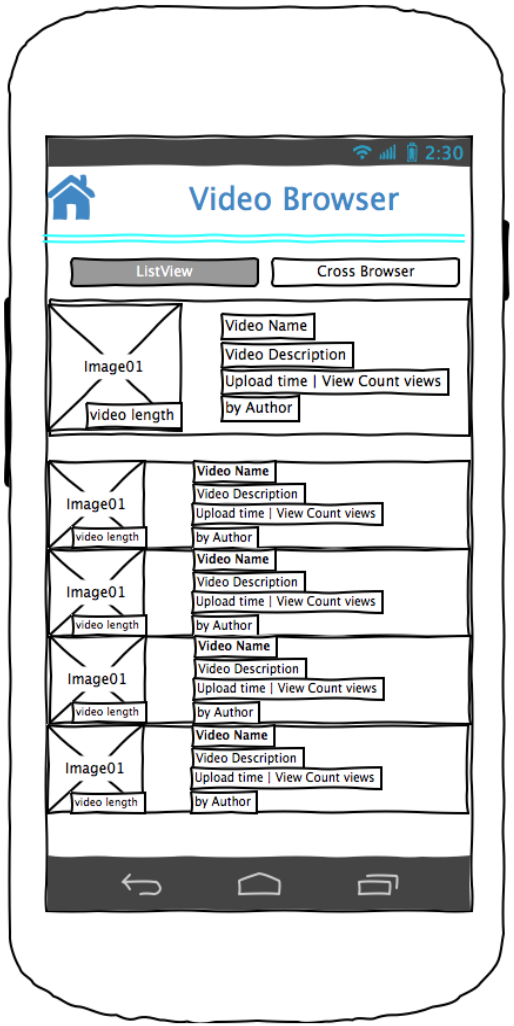


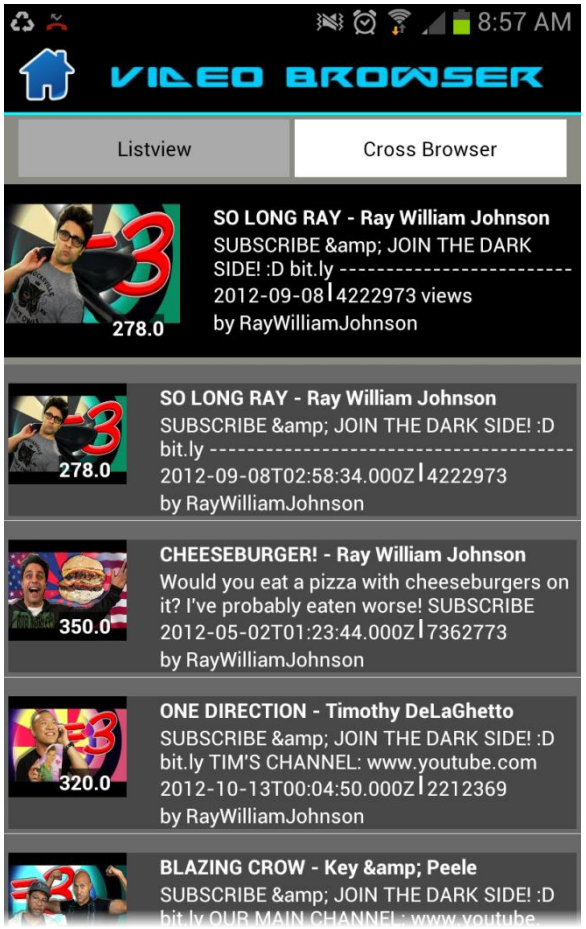
SCREEN BREAKDOWN (Screen 1)



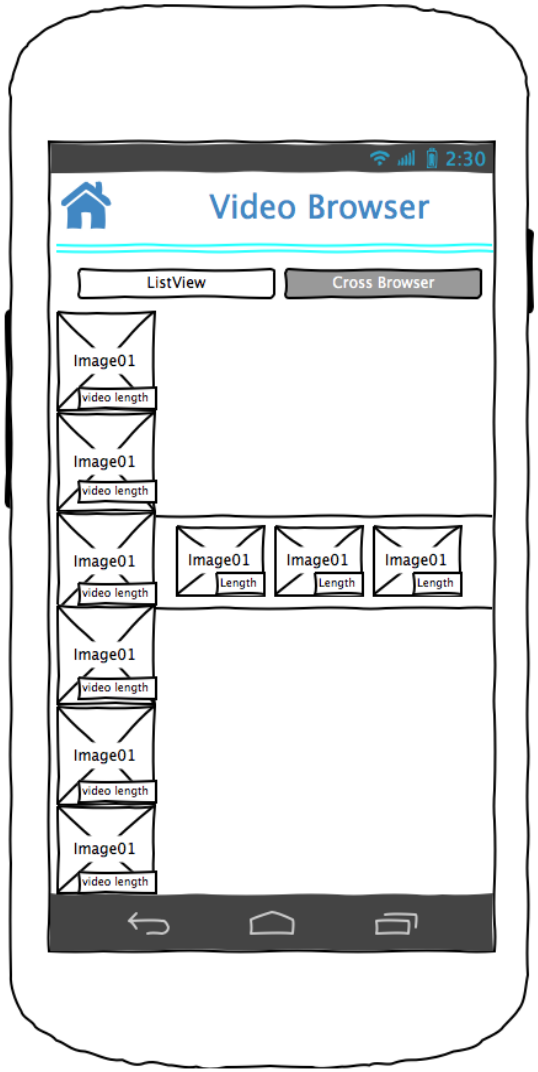


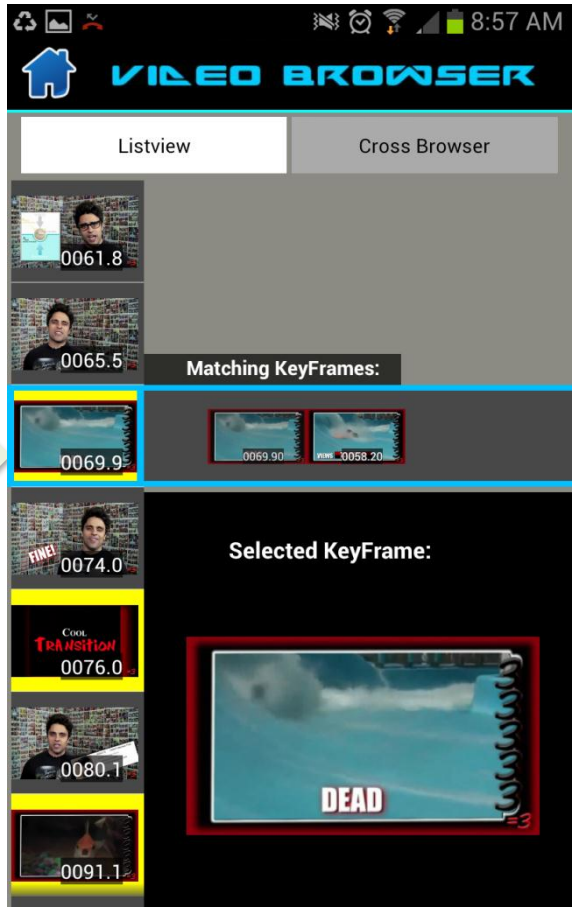
SCREEN BREAKDOWN (Screen 2)





SCREEN BREAKDOWN (Screen 3)





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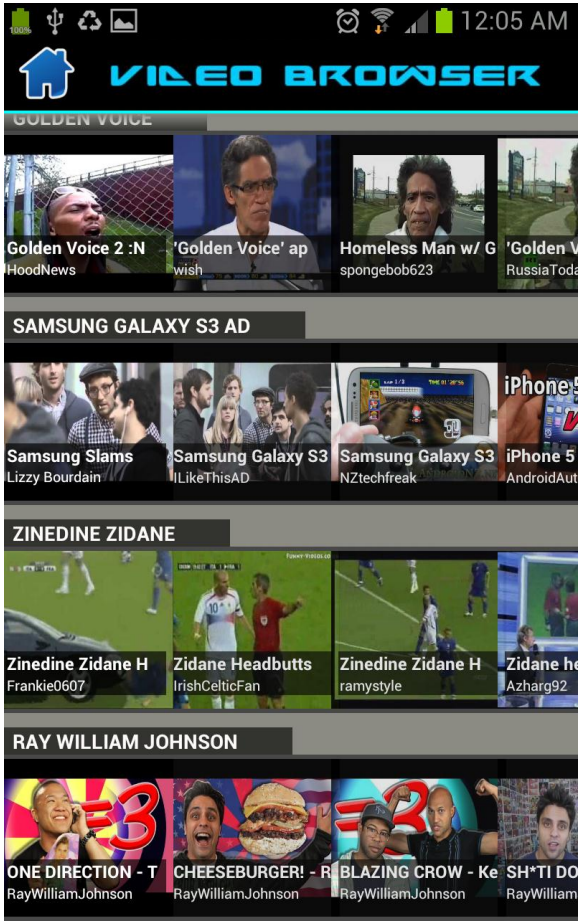

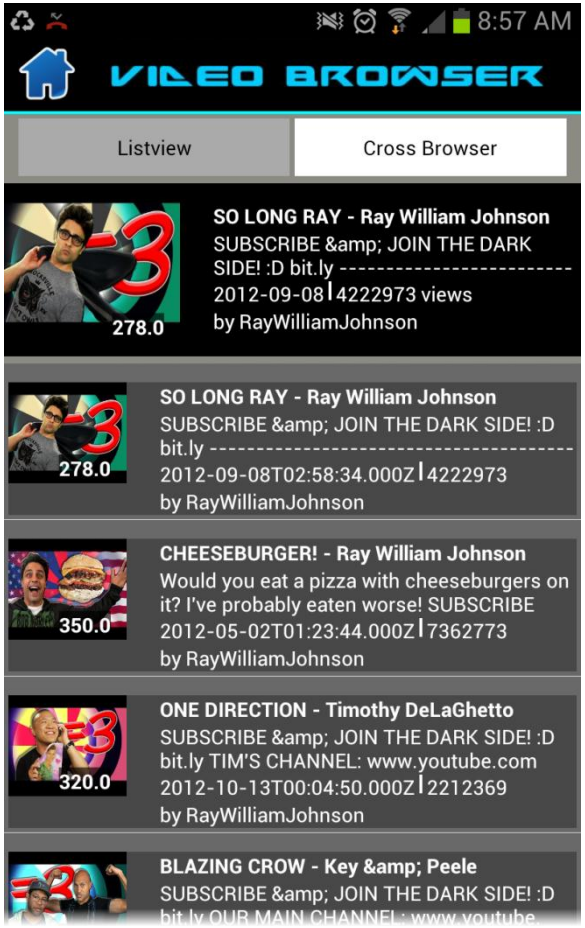

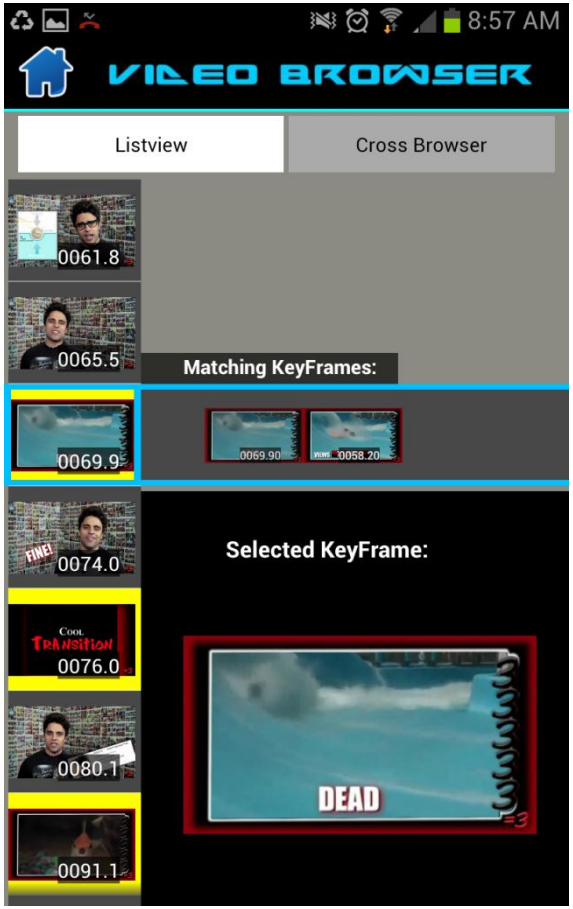

CODE STANDARDS + TESTING

Android

- Standard java coding conventions + JavaDocs Style comments etc.
- Standard Testing of classes

Server

- Output verified using JSON Validator

User Acceptance Testing

FUTURE WORK

Feature additions

- Ability to allow users to provide their own categories
- Allow users to provide their own video clips for searching

Scalability

- Increase server's capacity in handling large amounts of queries
- Long-term solution for downloading videos

Other Platform developments

- iOS platform and Tablet development

CONCLUSION

THANKS!

Any Questions/ Feedback? ☺

REFERENCES

Youtube video links:

http://www.youtube.com/watch?v=bY0GAsQXskY

http://www.youtube.com/results?search_query=xbox360

http://www.youtube.com/watch?v=LkOnsIhIcu8

Literature Review Paper:

http://users.cecs.anu.edu.au/~xlx/proj/visualmemes.html