Automatic Mobile Video Director

Alexander Egurnov University of Mannheim

Thilo Weigold University of Mannheim aegurnov@mail.uni-mannheim.de tweigold@mail.uni-mannheim.de jonup@student.matnat.uio.no

Jon Pettersen University of Oslo

Alf-André Walla University of Oslo alfandrw@ifi.uio.no

Abstract—The abstract goes here.

I. INTRODUCTION

This demo file is intended to serve as a "starter file" for IEEE conference papers produced under LATEX using IEEEtran.cls version 1.7 and later. I wish you the best of success.

II. RELATED WORK

Describe articles and how our work differs from theirs. Throw in some references [1] so bibliography does not look empty. [2]

III. METHODOLOGY

- A. System Overview
- B. Client application
- C. Server application

Server general description goes here. Video storage, database connection, server framework description.

D. Client-server interaction

1) Protocols: Our Automatic Mobile Video Director server implementation provides a general interface to applications which wish to interact with it. It is implemented through HTTP requests to certain server locations result.

GET /events

Lists all events (including videos) in JSON.

GET /event/id

Returns Event (including videos) in JSON.

POST /event/new

Create new event from JSON. Expects request body to be a JSON string containing attribute name.

POST /event/id

Upload JSON metadata about a video for Event with given id.

PUT /video/video id

Upload video video_id from Event id. Expects request body to be a file stream containing a full video file.

GET /video/video id

Retrieve video video_id from Event id.

GET /selected

Retrieve a list of selected but not yet uploaded videos in JSON.

E. Metadata format

JSON vs XML arguments here As a final result we should state that metadata is transferred in JSON format.

iА

Client-side unique identification of the video.

filename

File name in client's local file system.

timestamp

Video creation time.

duration

Video duration in frames.

width

Video frame width in pixels.

height

Video frame height in pixels.

shaking

Amount of shaking detected by sensors.

status

Video status. Indicates video life cycle phase.

serverId

Server-side unique identification of the video. Needed for coordination of all clients.

IV. VIDEO DIRECTOR ALGORITHM

- A. Video life cycle
- B. Selection algorithm

V. EVALUATION

How good/bad it is.

- A. Data Traffic
- B. Battry consumptio

Who wants to test it?

C. Selection criteria

VI. FUTURE WORK

Put down all the awesome ideas we have.

VII. CONCLUSION

The conclusion goes here.

REFERENCES

- [1] P. Shrestha, P. H. de With, H. Weda, M. Barbieri, and E. H. Aarts, "Automatic mashup generation from multiple-camera concert recordings," in *Proceedings of the International Conference on Multimedia*, ser. MM '10. New York, NY, USA: ACM, 2010, pp. 541–550. [Online]. Available: http://doi.acm.org/10.1145/1873951.1874023
- [2] P. Seshadri, M. Chan, W. Ooi, and J. Chiam, "On demand retrieval of CrowdSourced mobile video," *IEEE Sensors Journal*, vol. Early Access Online, 2014.

TABLE I TASK DISTRIBUTION

Part	Task	Subtask	Responsible
Android application	Video Capture		Thilo Weigold
	Sensor data collection		Thilo Weigold
	Metadata class		Thilo Weigold
	Http Client	Post Method	Thilo Weigold
		Cookies, Callbacks	Alexander Egurnov
		Get & Update methods	Alexander Egurnov
	Background upload service		Thilo Weigold
	SQLite database connection		Thilo Weigold
	Preferences		Alexander Egurnov
	GUI		Thilo Weigold, Alexander Egurnov
	Client-server data exchange		Alexander Egurnov
Server application	RESTful Server application	Client authorization	Alf-André Walla
		Request processing	Alf-André Walla
		Video and Event logic	Alf-André Walla
	MySQL database connection		Jon Pettersen
	Video Director		Alf-André Walla
	Client-server data exchange debug		Alexander Egurnov
	Video upload		Alf-André Walla, Alexander Egurnov
Web Server	MySQL Administration		Alexander Egurnov
	Nginx setup for streaming video		Alexander Egurnov
	Decis to make formation		Alexandra E
Documentation	Basic template formatting		Alexander Egurnov