Imagely: An elastic cloud environment for online image processing

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***Abstract*—In this report we introduce *Imagely*, a cloud service for image processing. It runs on top of Amazon Web Services compute resources to provide elastic scaling capabilities and we show that it can achieve a speedup of upto x.xx at peak load, compared to baseline performance.**

1 INTRODUCTION

2 APPLICATION

The application which we build is a web-based image manipulator which supports basic operations on the given image(s) such as crop, border, frame, trim, chop, draw, annotate, resize, scale, magnify, etc. A sequence of operations on the same image can be specified in a single request. We use the ImageMagick[1] application for the aforementioned operations and wrap it with a thin NodeJS[2] web server.

3 SYSTEM DESIGN

3.1 Resource Management Architecture

3.2 System Policies

3.3 Additional System Features [OPTIONAL]

4 EXPERIMENTAL RESULTS

4.1 Experimental Setup

4.2 Experiments

(1) *Charged-time*:
(2) *Charged-cost*:
(3) *Service metrics of the experiment*:
(4) *Usage metrics of the experiment (OPTIONAL)*:

5 CONCLUSION

REFERENCES

[1] Imagemagick.
[2] Nodejs.

APPENDIX A: TIME SHEETS

[TODO: Restructure this section onto a table]

Project:

(1) *Total time*:
(2) *Think time*:
(3) *Dev time*:
(4) *XP time*:
(5) *Analysis time*:
(6) *Write time*:
(7) *Wasted time*:

Per Experiment:

(1) *Total time*:
(2) *Dev time*:
(3) *Setup time*: