HOWEST

THESIS

Automated deployment of a white-label web application

Author:
Niek CANDAELE

Supervisor:
Thomas CLAUWAERT

February 12, 2021

Declaration of Authorship

I, Niek CANDAELE, declare that this thesis titled, "Automated deployment of a white-label web application" and the work presented in it are my own. I confirm that:

- This work was done wholly or mainly while in candidature for a research degree at this University.

- Where any part of this thesis has previously been submitted for a degree or any other qualification at this University or any other institution, this has been clearly stated.

- Where I have consulted the published work of others, this is always clearly attributed.

- Where I have quoted from the work of others, the source is always given. With the exception of such quotations, this thesis is entirely my own work.

- I have acknowledged all main sources of help.

- Where the thesis is based on work done by myself jointly with others, I have made clear exactly what was done by others and what I have contributed myself.

Signed:

_____

Date:

_____

"Funny or thought provoking quote goes here"

Someone, somewhere

HOWEST

Abstract

Bachelor of applied computer science

Automated deployment of a white-label web application

by Niek CANDAELE

A case study and practical implementation of a white-labeled web application. Starting with an existing application, proceeding with analysis of the current implementation and problems, investigating potential solutions and finally implementing them

Acknowledgements

Thanks to Thomas Clauwaert, Serge Morel, en de rest . . . :)

Contents

List of Figures

List of Tables

List of Abbreviations

AWS   **A**mazon **W**eb **S**ervices

For/Dedicated to/To my…

Chapter 1

Intro

1.1   How it used to be

Stampix is a startup that prints photos. Stampix' customers are companies, these companies buy printcodes which they can then distribute to their users in context of marketing or loyalty campaigns. Every client gets their own branded web application.

This involves:

- Storing all brand-related content in a CMS (Contentful)

- Pulling in all that content during app runtime

- Deployments for new clients require a lot of manual configuration / dev work

- There's no automated tests, which can cause broken deployments if not careful

This had a few problems which I will explain in detail later ...

1.2   Solutions

Following are the methods used to improve this workflow. Each method will probably get it's own detailed chapter later?

- Using a static site generator to build web app and assets during build time

- Automated testing (Selenium-like / snapshots / unit)

- Deploying each built application to AWS

Appendix A

Performance reports

A.1 Initial performance

Lighthouse scores? Some trace info? Other performance indicators?