# GECko
## Software project, work update 4

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# Table of Contents

# Table of Contents
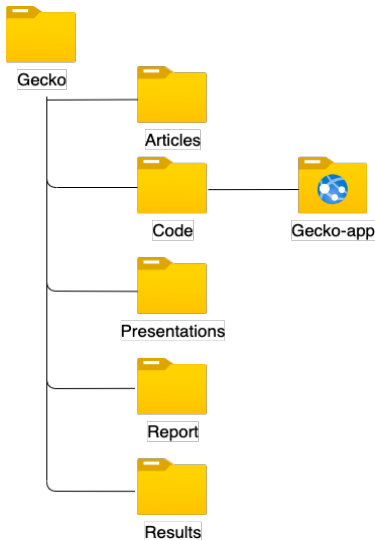
# DevOps

**Docker**

- Docker file ($\sim$10 instructions)
- Building docker image ($\sim$4 GB)
- Built on top of Python 3.7 image

**Azure ML**

- Container Registry
- Free Azure Credits
- Dedicated App Service Plan

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# Git Structure



- Isolated environment for the app
- Separated history for the app
- Avoid path-related issues

# App Structure

# Table of Contents
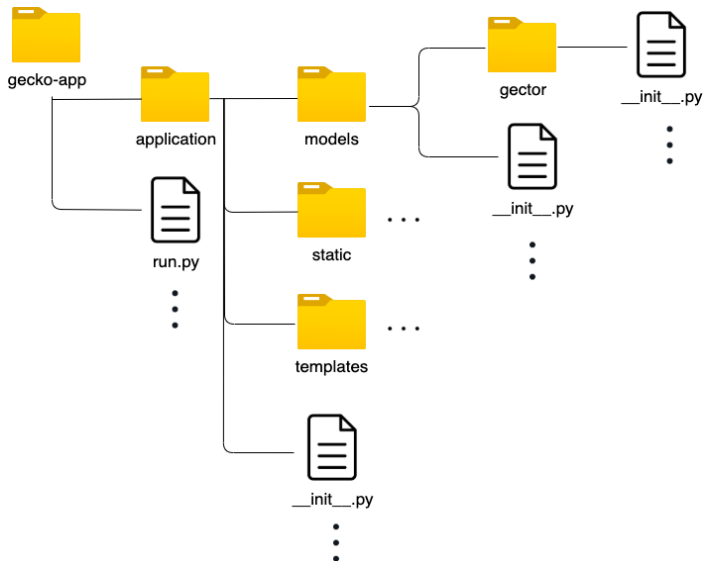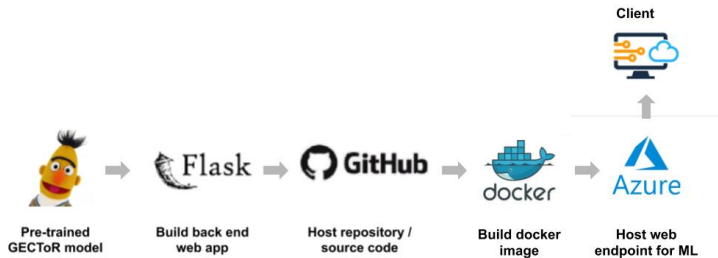
# Project Workflow



Pre-trained GECToR model → Build back end web app → Host repository / source code → Build docker image → Host web endpoint for ML → Client

# Web App is Up and Running!

https://gecko-ai.azurewebsites.net

# Table of Contents

# Problems Investigation

Separation of Development and Production environments:

- Dev offline, Prod online
- Sass performance
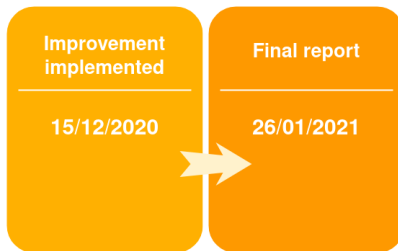- Security issues

# Improvements

- Mobile-responsive website
- Token-wise delta function

# Possible Development Directions

1. Features addition on the current version:
   - Glossary with personalized entries
   - Database
2. Discourse error corrector:
   - English Wikipedia corpus (shuffled at sentence level)
   - Co-reference resolution
   - Adding new sentence-level tags
   - Adapting model
3. Exploration of other GEC systems:
   - GingerIT
   - ERRANT

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# Milestones

| Improvement implemented | Final report |
|---|---|
| 15/12/2020 | 26/01/2021 |

# Thanks for listening!
## Questions?