

Group Project  
Documentation: part 4

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Indexes for European Countries*  
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# Abstract

This document contains model descriptions for the engineering group diploma thesis entitled “Application for Analysis of the Economic Growth Indexes for European Countries”. It is a continuation of the previous document „Group Project Documentation: part 2”. The document is dedicated to a module containing clustering models, providing their descriptions, required parameters and exemplary results, as well as baseline evaluation and comparison. Furthermore, the application template and code with models implementation are an appendix to this part of the documentation.

## History of changes

|  |  |  |  |
| --- | --- | --- | --- |
| **Date** | **Author** | **Description** | **Version** |
| 5.01.2021 | Agata Makarewicz | Template, installation instruction | 1.0 |
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# Vocabulary

**Homepage** - a webpage presented after turning on the application. It will have all of the functionalities like filtering data and generating the report.

**“Read about the project" page** – a webpage that will present all of the information about the project, authors and contact email addresses.

**Report –** content from homepage consisting of charts and results of clustering algorithms with comments.

**Clustering** - the task of dividing a set of objects into several groups called clusters in such a way that objects within the same cluster are more similar to each other than to objects in other clusters.

**Model** – machine learning algorithm used for clustering.

# Errata to Documentation Part 1 & 2

# Deployment documentation

* Windows?
* Install python 3.8/3.9
* Install R 3.6/4.0
* Add R\_LIBS\_USER to your user variables
* (edit system variables) variable equal to path to R library (/path/to/directory/R/win-library/[version]) (C:\Users\agama\Documents\R\win-library\4.0)
* Create Python virtual environment. Open Command Line and run following command: *python -m venv {/path/to/environment/directory}*
  + Example: python -m venv …

# Installation instruction

1. Clone Github repository from the following location: <https://github.com/amakarewicz/BEngThesis>
2. Run Command Line as an Administrator and enter the directory with the repository (BEngThesis).
   1. Example: *C:\Users\agama\Documents\BEngThesis*
3. Run install\_requirements.sh file, adding path to created previously Python virtual environment directory and path to R directory as command arguments.
   1. Command template: *install\_requirements.sh "{/path/to/python/env }" "{/path/to/R}”*
   2. Example: *install\_requirements.sh “C:\Users\agama\Documents\BEngThesis\django\bengthesis” “C:\Program Files\R\R-4.0.0”*
4. Run start\_app.sh file, adding path to created previously Python virtual environment directory as command argument (same as in the previous step).
   1. Command template: *start\_app.sh “{/path to python/env}“*
   2. Example: *start\_app.sh “C:\Users\agama\Documents\BEngThesis\django\bengthesis”*
5. Run <http://127.0.0.1:8000/homepage> in your browser.

# Acceptance tests

Bez screenów, tylko opis

# User’s Manual

Dodać screeny z instrukcją co i jak klikać, zwięźle, max a4

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