User guide for the repository `IO-TEMPLATE-APP`

`IO-TEMPLATE-APP` is a template repository for creating Python applications. This document describes how to use this repository to create a new repository. In the following instructions, we assume that the new repository should be named `my-app` and the application to be created with it should be named `myapp`.

I. Requirements

Regarding operating system, Ubuntu version 20.04 and above and Windows version 10 and above are supported. An existing Python 3 installation is required. Furthermore, the use of an IDE or a text editor that can replace texts across files is useful.

II. Repository creation

1. Create the new repository `my-app`

As described here, the new repository my-app must first be created.

2. Create a local copy of the new repositoy `my-app`

```
git clone https://github.com/io-aero/my-app
```

3. Delete the two files with the User's Guide

```
`user_guide.md`
`user_guide.pdf`
```

4. Rename the following file directories and files

Old name	New name
`iotemplateapp`	`myapp`
`run_io_template_app.bat`	`run_my_app.bat`
`run_io_template_app.sh`	`run_my_app.sh`

5. Replacing texts in the new repository `my-app`

It is absolutely necessary to respect the capitalization!

Old text	New text
`IO-TEMPLATE-APP`	`MY-APP`
`IO_TEMPLATE_APP`	`MY_APP`

Old text	New text
`io-template-app`	`my-app`
`io_template_app`	`my_app`
`iotemplateapp`	`myapp`

6. Store your AWS access rights in file `~/.aws/credentials`

```
[default]
aws_access_key_id=...
aws_secret_access_key=...
```

7. Test the current state of the new application

7.1 If Miniconda is required

- Install Miniconda
- Run `make conda-dev`
- Run `make final`

7.2 If Miniconda is not required

- Run `make pipenv-dev`
- Run `make final`

8. Define GitHub Actions secrets

Under 'settings' -> 'Secrets and variables' -> 'Actions' -> Tab 'Secrets' define the following 'New repository secret's:

```
AWS_ACCESS_KEY_ID
AWS_SECRET_ACCESS_KEY
GLOBAL_USER_EMAIL
```

9. Define GitHub repository variables

Under 'settings' -> 'Secrets and variables' -> 'Actions' -> Tab 'Variables' define the following 'New repository variable's:

Name	Value	Reason
`CONDA`	`true`	Include Miniconda
`COVERALLS`	`true`	Run coveralls.io

10. Commit and push all changes to the repository as 'Base version'