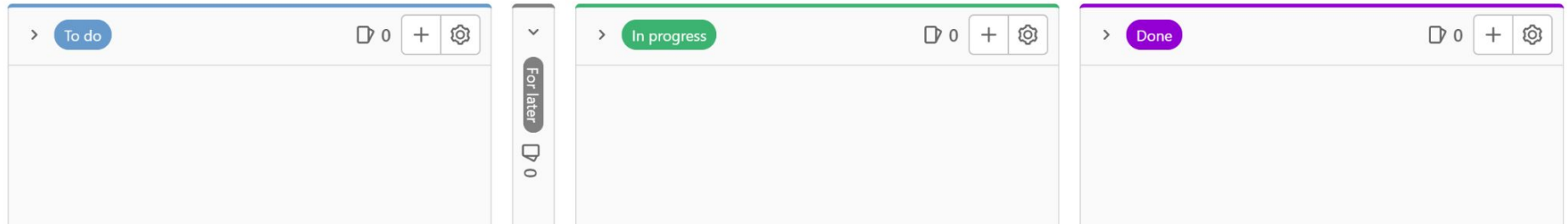


BioSim project for INF200

by Andrine Zimmermann and Karin Mollatt

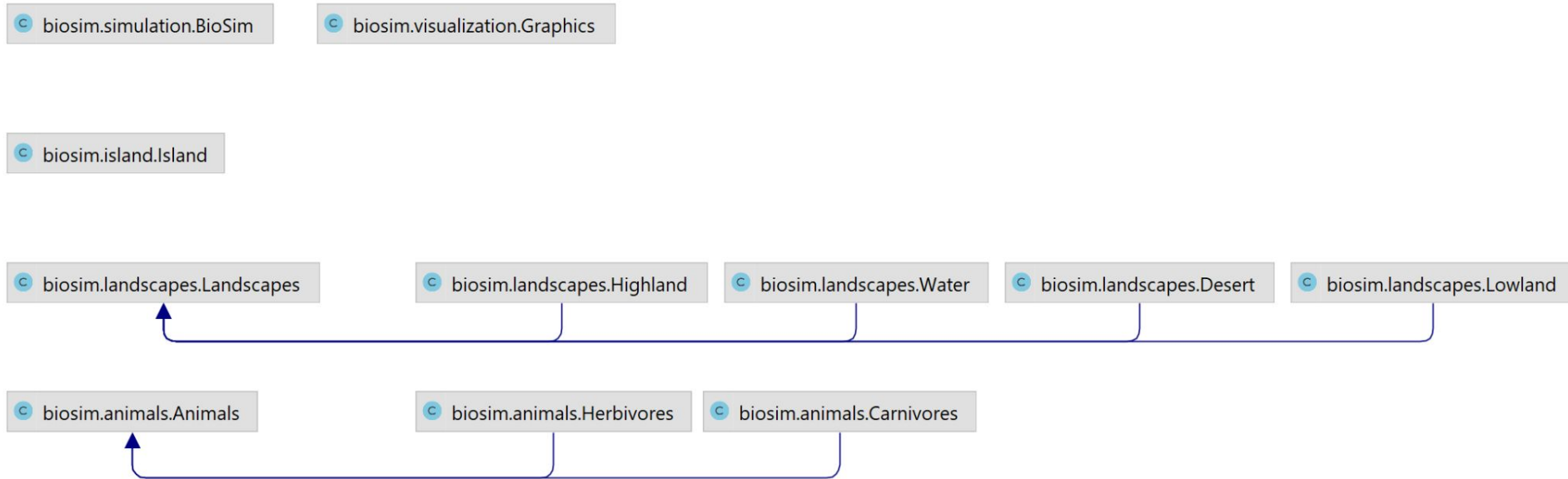
24.01.2022

Approach of project



- Gitlab
- Preparation
- Time management

Structure of code



Example of a solved problem

```
moved_herbs = []
moved_carns = []
```

```
if self.map[cell].available is True:
    migrated_herbs, migrated_carns = self.map[cell].distribute_migrated_animals()

    for herb in migrated_herbs:
        next_loc = self.find_adjacent_cell_migrate(cell)
        if self.map[next_loc].available is False:
            break
        else:
            self.map[next_loc].add_single_animal(herb)
            herb.has_migrated = True
            moved_herbs.append(herb)

    self.map[cell].list_herbivores = [herb for herb in self.map[cell].list_herbivores
                                     if herb not in moved_herbs]

    for carn in migrated_carns:
        next_loc = self.find_adjacent_cell_migrate(cell)
        if self.map[next_loc].available is False:
            break
        else:
            self.map[next_loc].add_single_animal(carn)
            carn.has_migrated = True
            moved_carns.append(carn)

    self.map[cell].list_carnivores = [carn for carn in self.map[cell].list_carnivores
                                     if carn not in moved_carns]
```

Test coverage

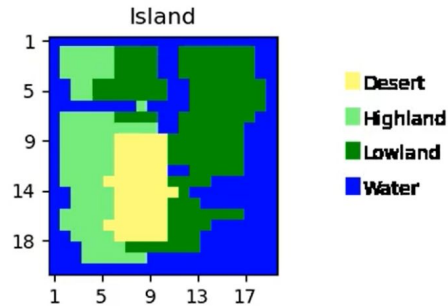
```
tests\test_landscapes.py ..... [ 44%]
tests\test_island.py ..... [ 52%]
tests\test_simulation.py ..... [ 56%]
tests\test_biosim_interface.py ..... [ 75%]
tests\test_animals.py ..... [100%]
```

```
----- coverage: platform win32, python 3.8.11-final-0 -----
Name                               Stmts  Miss  Cover
-----
.tox\py38\Lib\site-packages\biosim\__init__.py           3     0   100%
.tox\py38\Lib\site-packages\biosim\animals.py          105     3    97%
.tox\py38\Lib\site-packages\biosim\island.py            148     6    96%
.tox\py38\Lib\site-packages\biosim\landscapes.py         125     3    98%
.tox\py38\Lib\site-packages\biosim\simulation.py          71     5    93%
.tox\py38\Lib\site-packages\biosim\visualization.py      211    32    85%
-----
TOTAL                                           663    49   93%
```

```
===== 127 passed in 30.66s =====
```

```
----- summary -----
```

```
py38: commands succeeded
congratulations :)
```



Year: 400

