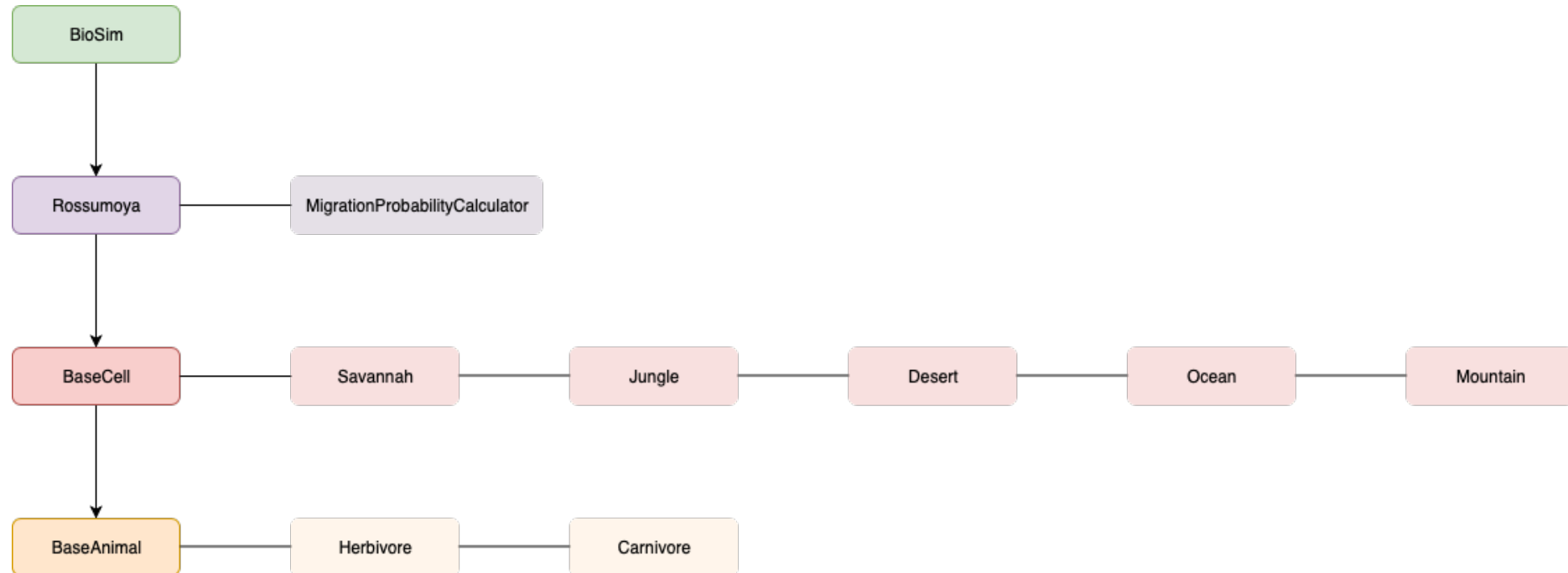# BioSim project

G21 - Julie Førrisdal & Marisha Gnanaseelan

January 2020

Flow chart that gives a visual representation of the code structure
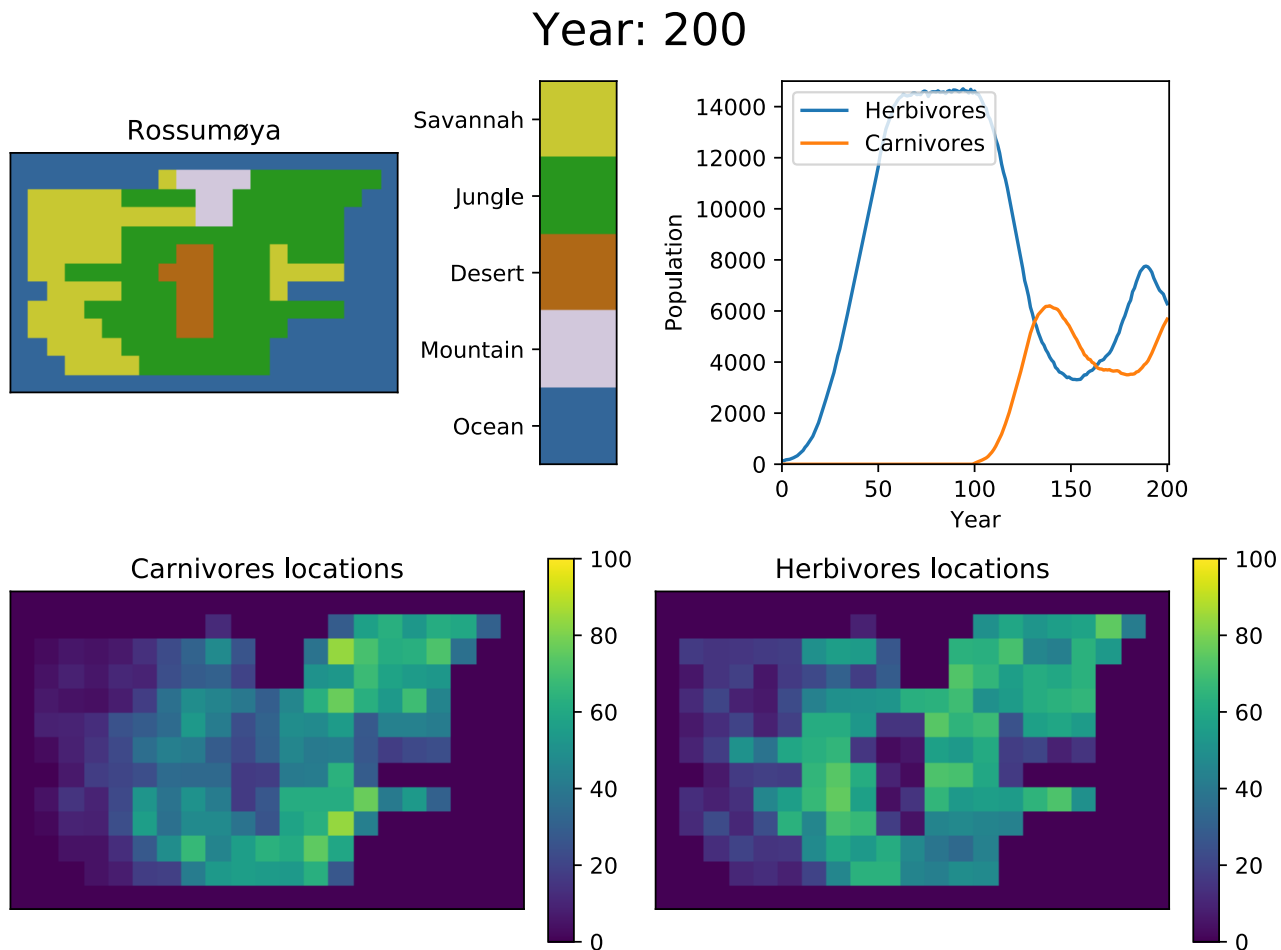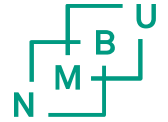
Our test coverage

Coverage report: 96%

Module ↓	statements	missing	excluded	coverage
src/biosim/__init__.py	2	0	0	100%
src/biosim/animal.py	153	21	0	86%
src/biosim/cell.py	212	2	0	99%
src/biosim/rossumoya.py	167	5	0	97%
src/biosim/simulation.py	255	4	0	98%
Total	**789**	**32**	**0**	**96%**

coverage.py v5.0.3, created at 2020-01-23 09:44

A figure demonstrating the visualization from our simulation

Optimization

BioSim_G21_Julie_Marisha66.pstat

Statistics   Call Graph

Name	Call Count	Time (ms)		Own Time (ms) ▼	
fitness	56264463	50257	19,7 %	44300	17,4 %
prob_carnivore_kill	13128969	29001	11,4 %	22009	8,6 %
total_herbivores	499006	21986	8,6 %	21986	8,6 %
carnivores_eat	13616	94912	37,2 %	18730	7,3 %
list_of_sorted_herbivores_by_fitness	401931	45610	17,9 %	16639	6,5 %
prob_death	2383790	26248	10,3 %	9570	3,8 %
<built-in method builtins.sorted>	415632	27559	10,8 %	9416	3,7 %
<lambda>	14770450	17199	6,7 %	8750	3,4 %
prob_migration	2573760	23002	9,0 %	8623	3,4 %
total_carnivores	255311	7998	3,1 %	7998	3,1 %
abundance_of_fodder_carnivores	159465	13588	5,3 %	7745	3,0 %
prob_procreation	2383229	7821	3,1 %	4350	1,7 %
herbivores_eat	27741	11458	4,5 %	3898	1,5 %
<method 'append' of 'list' objects>	20077640	3691	1,4 %	3691	1,4 %
custom_binomial	8952232	3639	1,4 %	3639	1,4 %