

	Sprint 1								
	Sprint 2								
	Sprint 3								
	Sprint 4								
	Sprint 5								
Priority	Product Backlog Item	Sprint Task	Volunteer	Initial Estimate of Effort (1-15)	New Estimates of Effort				
					1	2	3	4	5
1	Domain understanding	Choose environment factors that will change the state of the system	All members	2	2	-	-	-	-
2		Model definition of the main entities	All members	10	12	-	-	-	-
3		choose environment behaviour (i.e. Number of bunny cubs)	All members	6	8	-	-	-	-
4		Choose bunny genes	All members	3	5	-	-	-	-
5	ScalaFX library understanding	Understand how to use Charts	Lucchi, Spadoni	5	6	-	-	-	-
6		Understand how to move objects inside GUI	Baiardi	8	10	3	-	-	-
7		Understand Panel Management	All members	4	5	-	-	-	-
8		Scene Builder tool study	Rocco	6		5	-	-	-
9	Define CI GitHub Actions		Baiardi, Reece	8	8	-	-	-	-
10	Bunnies	Draw bunnies with all the genes combination	Baiardi, Spadoni	10		5	-	-	-
11		Definition of the bunny and its genetics characteristics	Lucchi	10		10	-	14	-
12		Model design with idiomatic scala structures	Lucchi	15		12	-	-	-
13		Bunny gender	Lucchi	7					7
14	Application engine	Model definition of Generation and Environment structure	Spadoni	10		10	-	-	-
15		Model design with idiomatic scala structures	Spadoni	15		10	-	-	-

16	Basic GUI structure	Definition of static application layout with fxml	Baiardi, Reece	10		7	-	-	-
17		Basic application with moving entities	Baiardi	15		12	-	-	-
18		Show end simulation panel	Baiardi	2			2	-	-
19		Information for base bunny	Baiardi	5					3
20	Charts	Basic chart to show population	Reece, Spadoni	12			12	-	-
21		Show chart with bunny mutation proportions	Spadoni	12			12	-	-
22		Add chart choice panel	Baiardi	2			2	-	-
23	Genealogical tree chart	Model support to manage bunny generations (genealogical tree, ...)	Lucchi	5			5	-	-
24		Show chart with genealogical tree for bunnies	Lucchi	20			15	18	-
25		Add legend of alleles	Lucchi	5				4	-
26		Prolog rules for tree resizing inside Panel	Lucchi	10					8
27		Add gender in Tree and border on subject Bunny	Lucchi	2					4
28	Documentation	Requirements	Baiardi, Lucchi, Spadoni	3		-	3	-	2
29		Development process	Lucchi	3		-	3	-	-
30		CI	Baiardi	2		-	2	-	-
31		Update of the model UML to follow new updates	Baiardi, Lucchi	4				2	2
32		write README.md	Baiardi	1			1	-	-
33	Mutations	Gui panel to show the mutation choice	Baiardi	7			7	-	-
34		Model structure to manage mutation on the reproduction	Rocco	10			15	-	-
35	Environment climate	gui management of climate change click	Baiardi	5			5	-	-
36		model refactor of Environment entity	Baiardi	7			7	-	-
37		engine management on different climate -> Environment	Baiardi	2			2	-	-
38		Draw environment types of food	Baiardi, Spadoni	4				3	-

39	Disturbing Factors	Draw wolves	Baiardi, Spadoni	4				3	-
40		GUI Management of disturbing factors with climate	Rocco	5				7	-
41		Refactor of charts with the introduction of disturbing factors	Spadoni	5				5	-
42		Model management of disturbing factors	Baiardi	10				13	-
43	Gameplay flow management	Add gameplay speedup	Spadoni	10				10	-
44		Add gameplay restart	Lucchi	10				12	-
45		End panel for extinction	Baiardi	4					2
46	Scala style	Add ScalaFMT configuration	Lucchi	3				5	-
47	GUI refactoring	Add border to selected bunny	Baiardi	3				3	-
48		Fix Wolves movement	Rocco	4				2	3
49		Add clock for generations visualization	Rocco	10				7	2