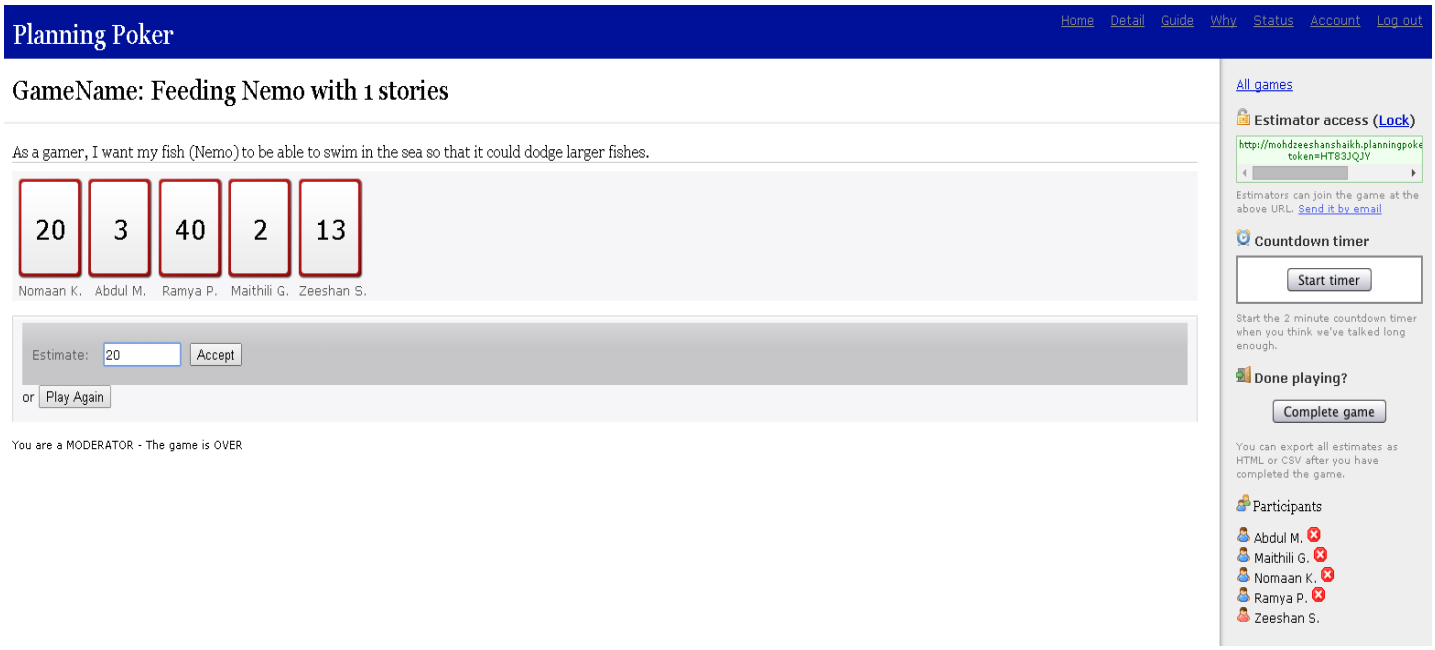
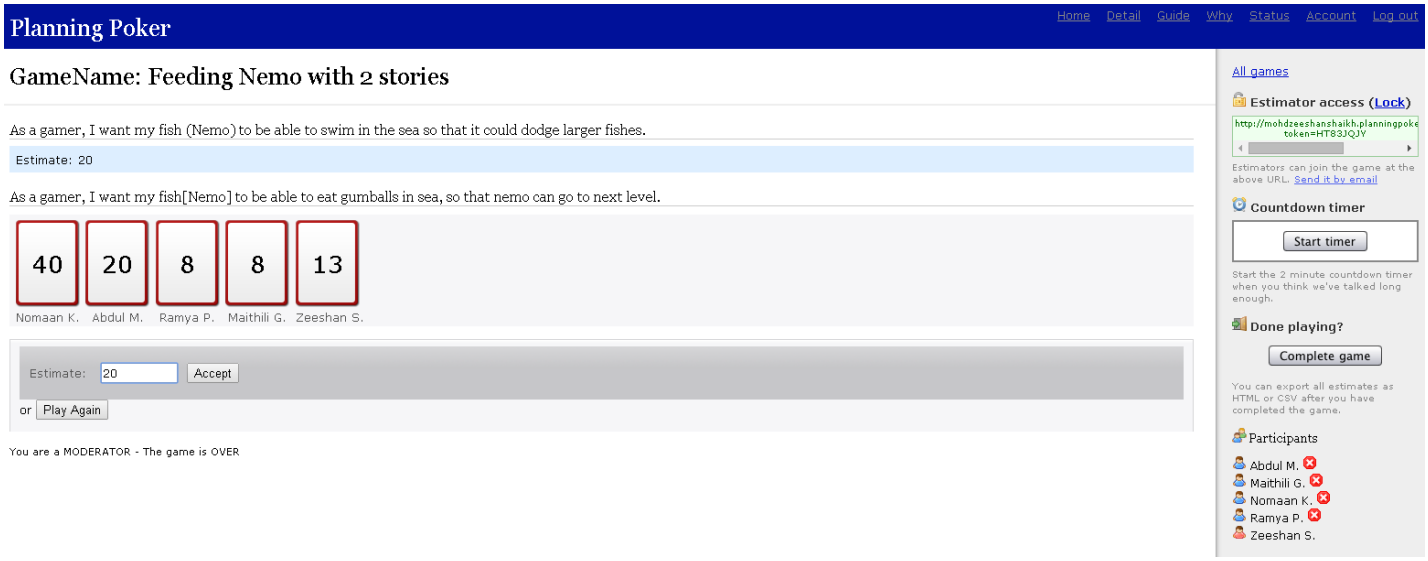
Project Report – Sprint 2 [Team #16]

Planning Poker

Story 1:



Story 2:



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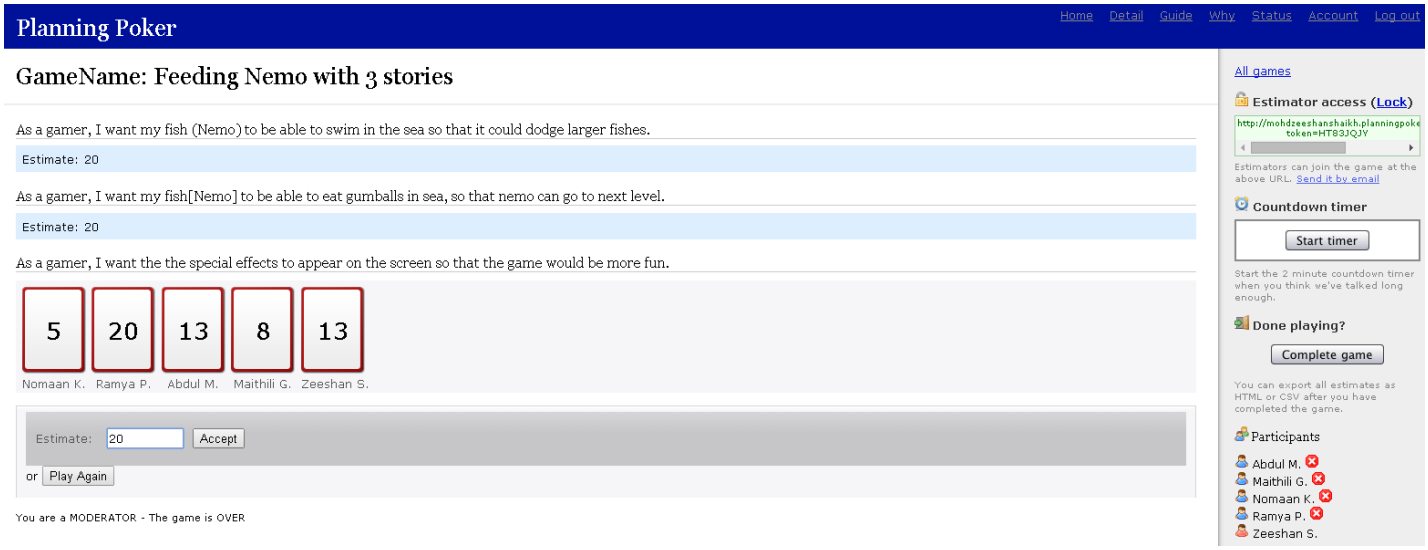

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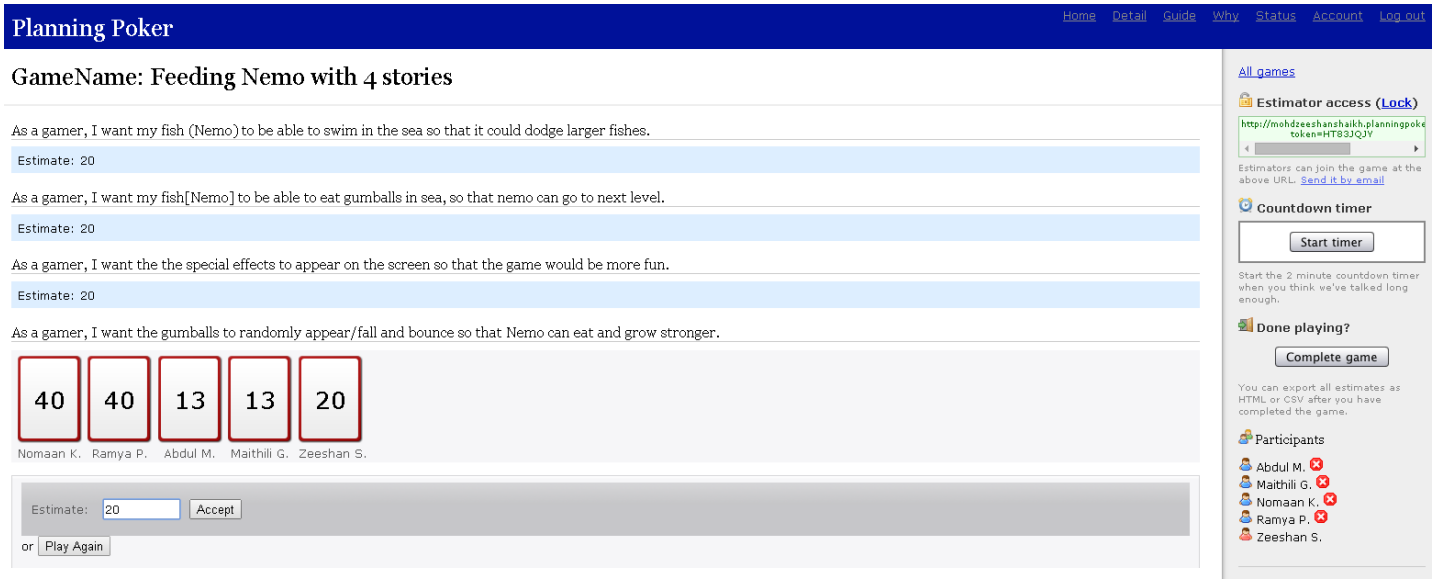
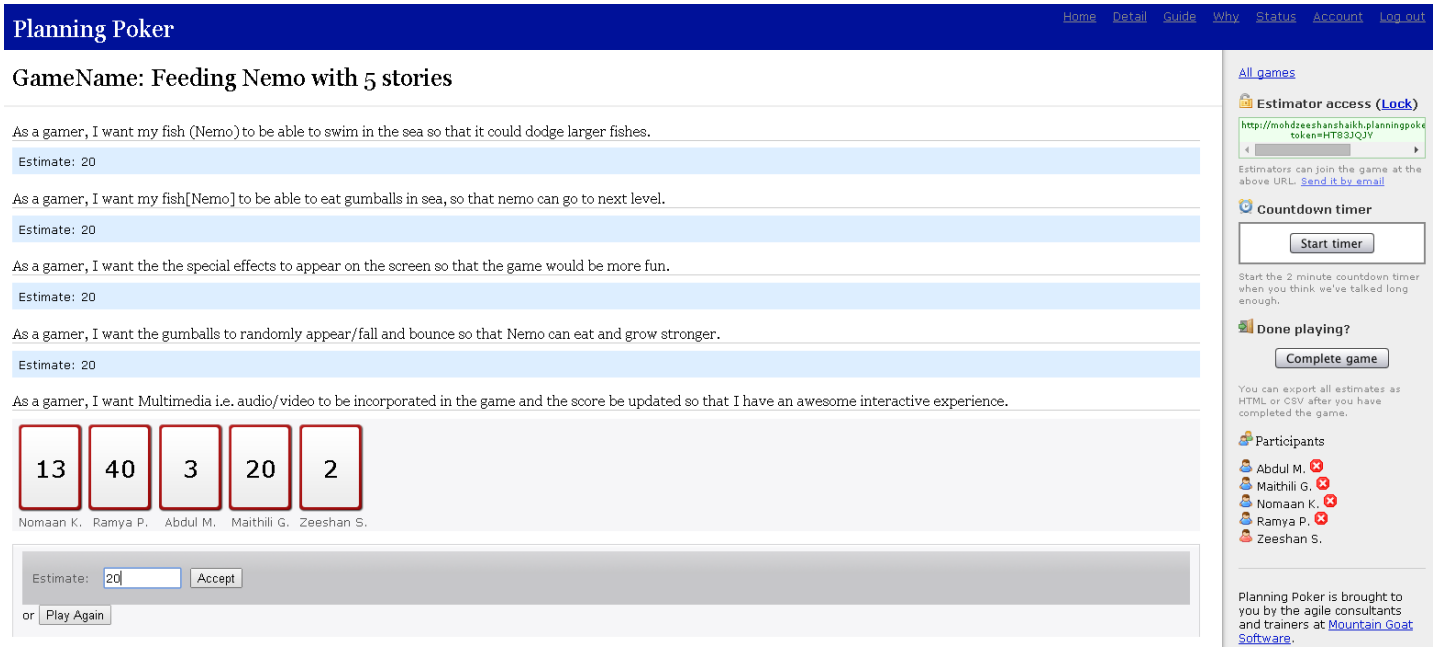
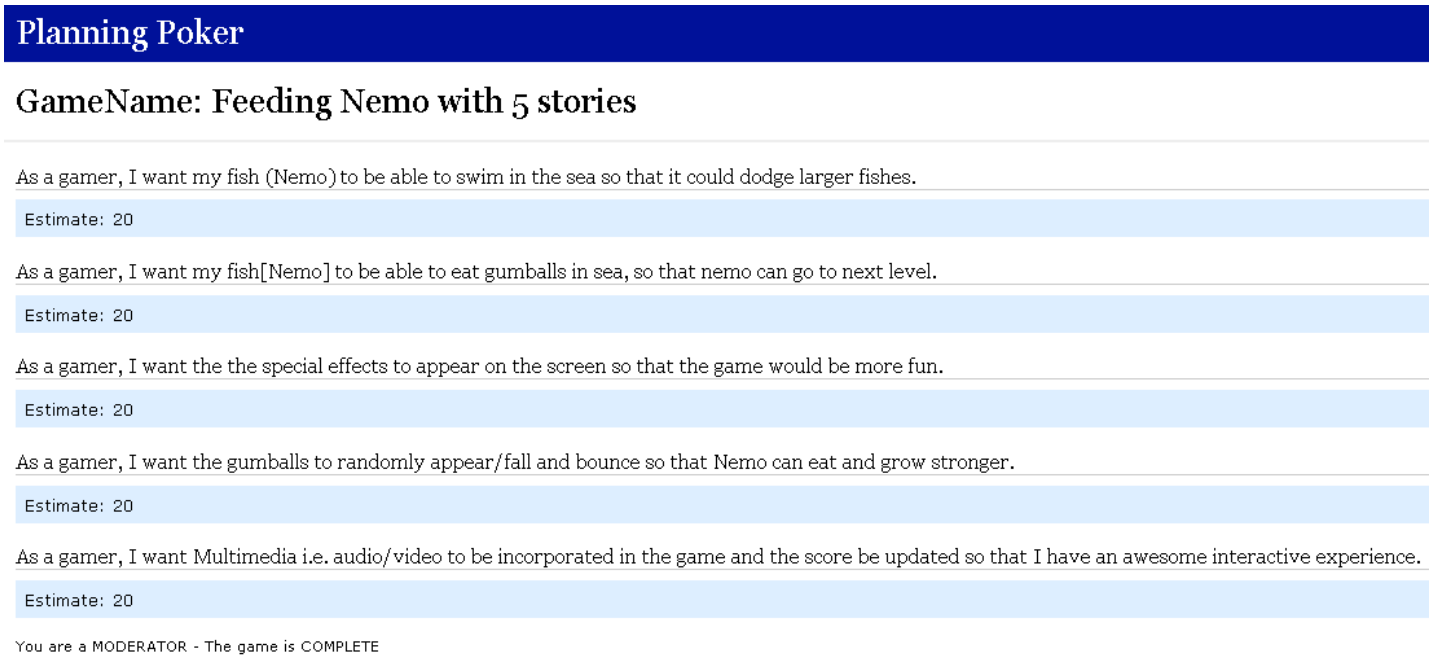


Story 5:



Final Estimation:



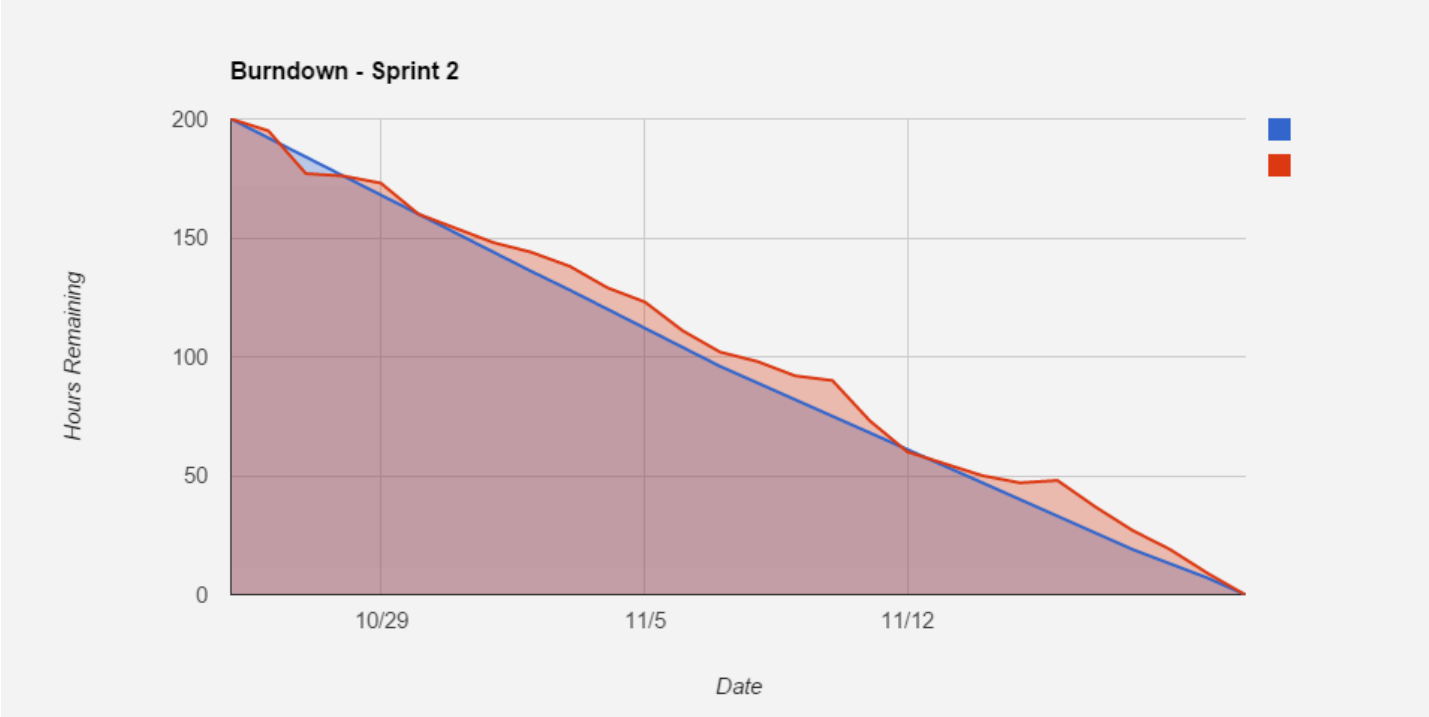
Team Taskboard/Sprint Plan:

User Stories, Task Breakdown, Team Member assignments and initial estimates in hours:

				Week #1 (10 hrs / week)							Week #2 (10 hrs / week)							Week #3 (10 hrs / week)							Week #4 (10 hrs / week)						
Backlog Item	Task	Task Owner	Initial Estimate (Total Sprint Hours = 40 x 5)	D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	D11	D12	D13	D14	D15	D16	D17	D18	D19	D20	D21	D22	D23	D24	D25	D26	D27	D28
				10/25	10/26	10/27	10/28	10/29	10/30	10/31	11/1	11/2	11/3	11/4	11/5	11/6	11/7	11/8	11/9	11/10	11/11	11/12	11/13	11/14	11/15	11/16	11/17	11/18	11/19	11/20	11/21
				200	192	184	176	168	160	152	144	136	128	120	112	104	96	89	82	75	68	61	54	47	40	33	26	19	13	7	0
			200	200	195	177	176	173	160	154	148	144	138	129	123	111	102	98	92	90	73	60	55	50	47	48	37	27	19	9	0
As a gamer, I want my fish[Nemo] to be able to roam around in the sea so that it could doodge the larger fishes.	Explore Design Patterns	Noman	10	10	10	8	7	6	5	5	4	5	4	4	4	3	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0
	Design	Noman	10	10	10	7	8	8	5	7	6	6	6	3	2	2	3	3	2	2	2	1	0	0	0	0	0	0	0	0	0
	Code	Noman	10	10	10	10	10	10	10	8	7	8	8	7	7	7	6	6	5	5	3	3	3	3	3	2	1	2	1	1	0
	Test	Zeeshan	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	9	7	7	7	7	7	7	6	5	4	3	2	0
As a gamer, I want my fish[Nemo] to be able to eat gumballs in sea, so that nemo can go to next level.	Explore Design Patterns	Abdul	10	10	9	9	6	7	5	4	7	5	4	3	2	2	2	2	2	4	1	0	0	0	0	0	0	0	0	0	0
	Design	Abdul	10	10	10	7	8	8	7	6	8	8	7	6	4	4	2	2	2	4	2	2	2	2	2	2	0	0	0	0	0
	Code	Abdul	10	10	10	9	10	10	10	10	10	10	10	9	8	7	6	5	4	4	4	2	5	4	4	3	3	1	2	1	0
	Test	Ramya	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	9	9	9	7	6	6	5	5	4	3	1	0
As a gamer, I want the the special effects to appear on the screen so that the game would be more fun.	Explore Design Patterns	Ramya	10	10	9	7	8	6	6	5	4	3	3	3	3	2	2	2	2	1	2	1	1	0	0	0	0	0	0	0	0
	Design	Ramya	10	10	10	9	8	9	8	7	5	5	5	6	5	4	4	4	5	3	2	2	1	1	1	0	0	0	0	0	0
	Code	Ramya	10	10	10	10	10	10	10	10	10	10	9	8	7	5	5	7	6	5	3	3	3	3	5	4	3	4	2	1	0
	Test	Maithili	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	9	9	8	8	7	8	7	6	6	4	3	1	1	0
As a gamer, I want the gumballs to randomly appear/fall and bounce so that Nemo can eat and grow stronger.	Explore Design Patterns	Zeeshan	10	10	9	7	6	6	6	5	4	3	3	5	4	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
	Design	Zeeshan	10	10	10	8	9	7	7	6	6	5	4	4	3	2	2	2	1	4	2	0	0	0	0	4	3	0	0	0	0
	Code	Zeeshan	10	10	10	10	10	10	9	9	8	6	5	4	8	8	7	7	7	9	6	4	3	3	1	6	6	4	2	1	0
	Test	Noman	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	9	9	9	8	8	7	7	5	5	3	2	2	1	0
As a gamer, I want Fullscreen / Multimedia i.e. audio/video to be incorporated in the game and the score be updated so that I have an awesome interactive experience.	Explore Design Patterns	Maithili	10	10	9	6	6	7	5	6	5	6	6	5	5	4	3	2	2	1	0	0	0	0	0	0	0	0	0	0	0
	Design	Maithili	10	10	9	10	10	9	7	7	6	6	6	5	4	4	3	2	2	1	1	0	0	0	0	0	0	0	0	0	0
	Code	Maithili	10	10	10	10	10	10	10	9	8	8	8	7	7	5	5	4	4	4	3	3	2	3	3	3	2	1	1	0	0
	Test	Abdul	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	8	6	4	4	2	2	2	2	0	0

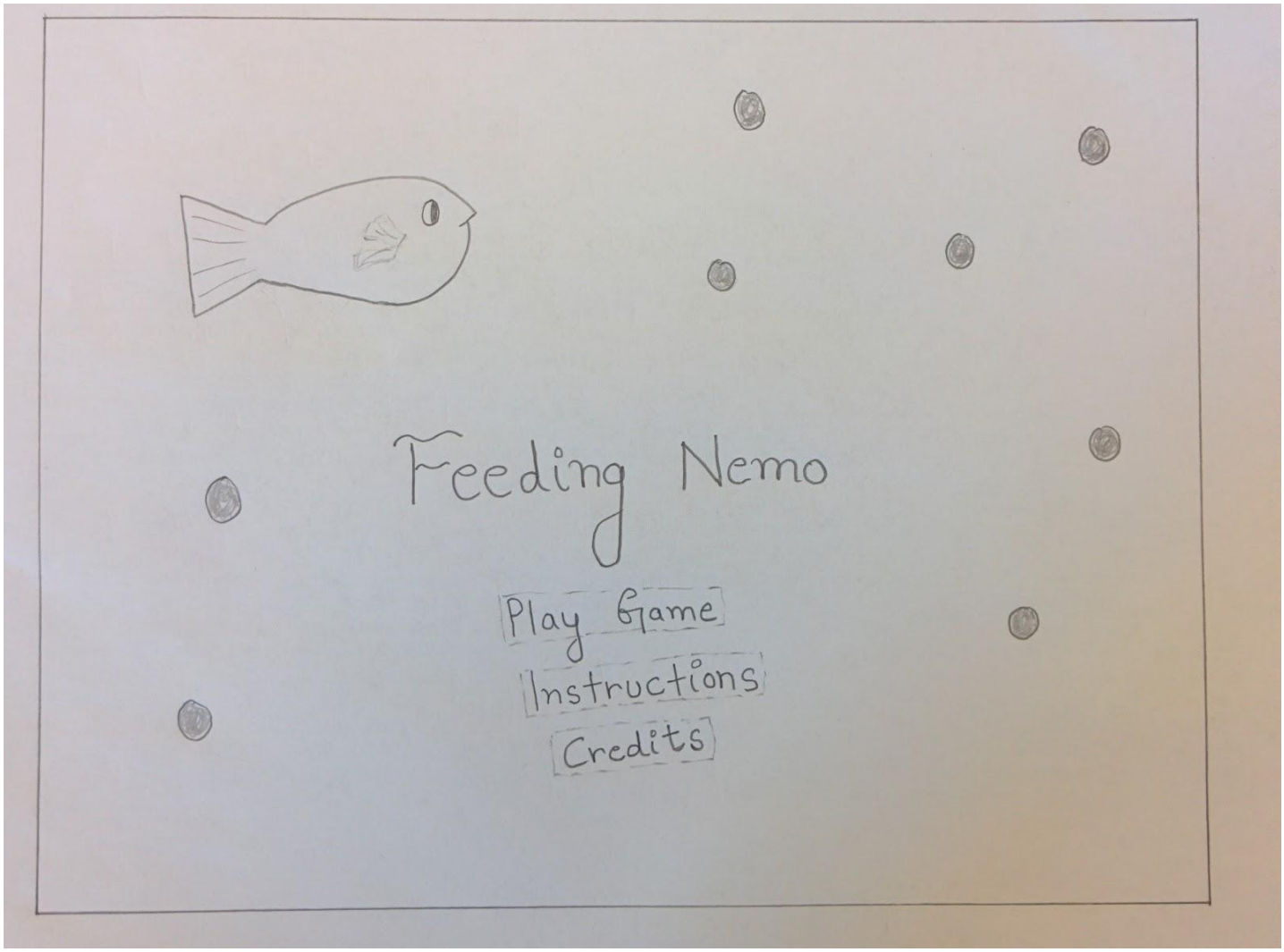
Team Members	Hours per Week
Zeeshan	10 hours / Week
Abdul	10 hours / Week
Maithili	10 hours / Week
Ramya	10 hours / Week
Noman	10 hours / Week
Total Available Hours During Sprint:	**200**

Burndown Chart:

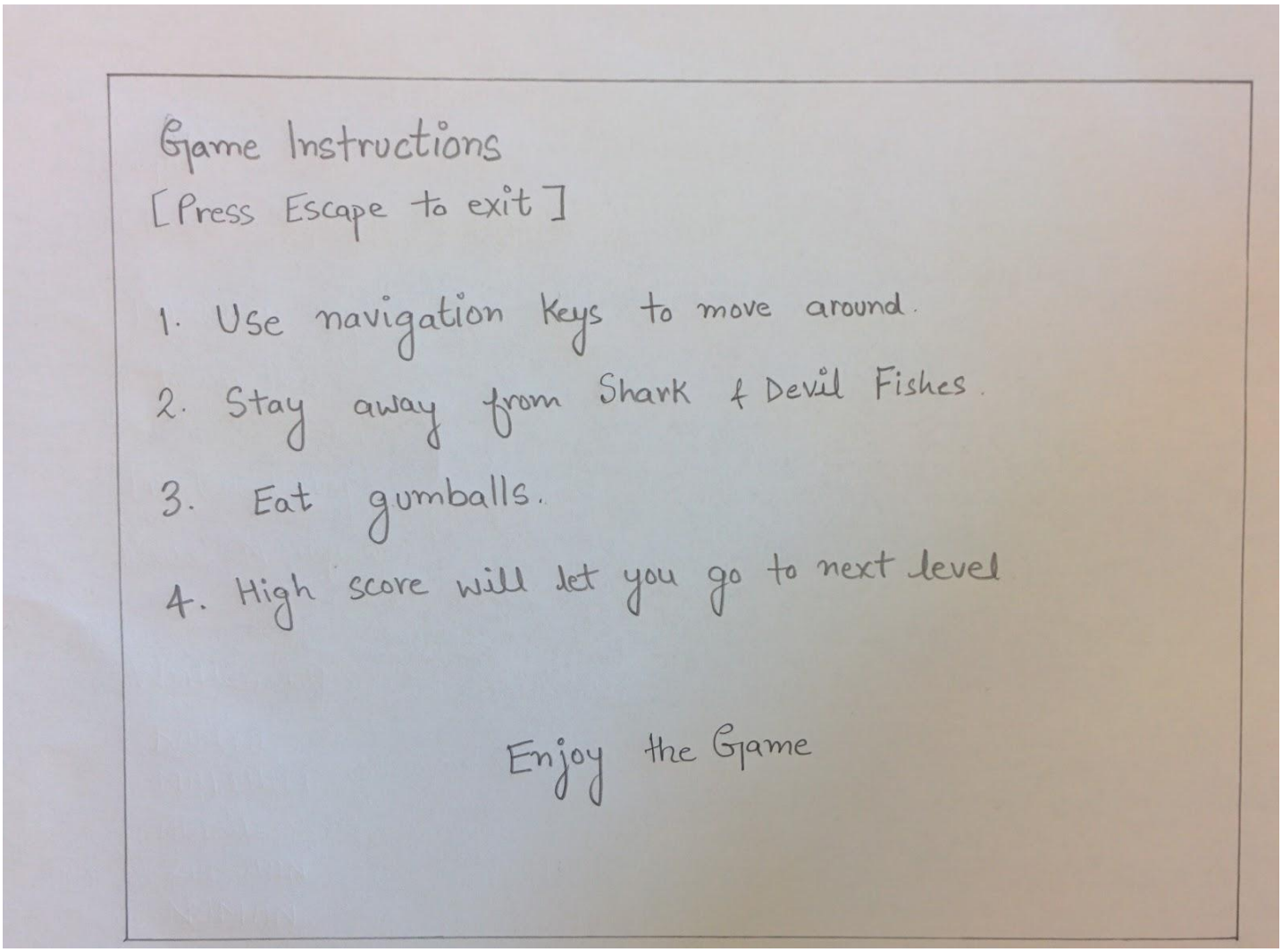


UI Wireframes:

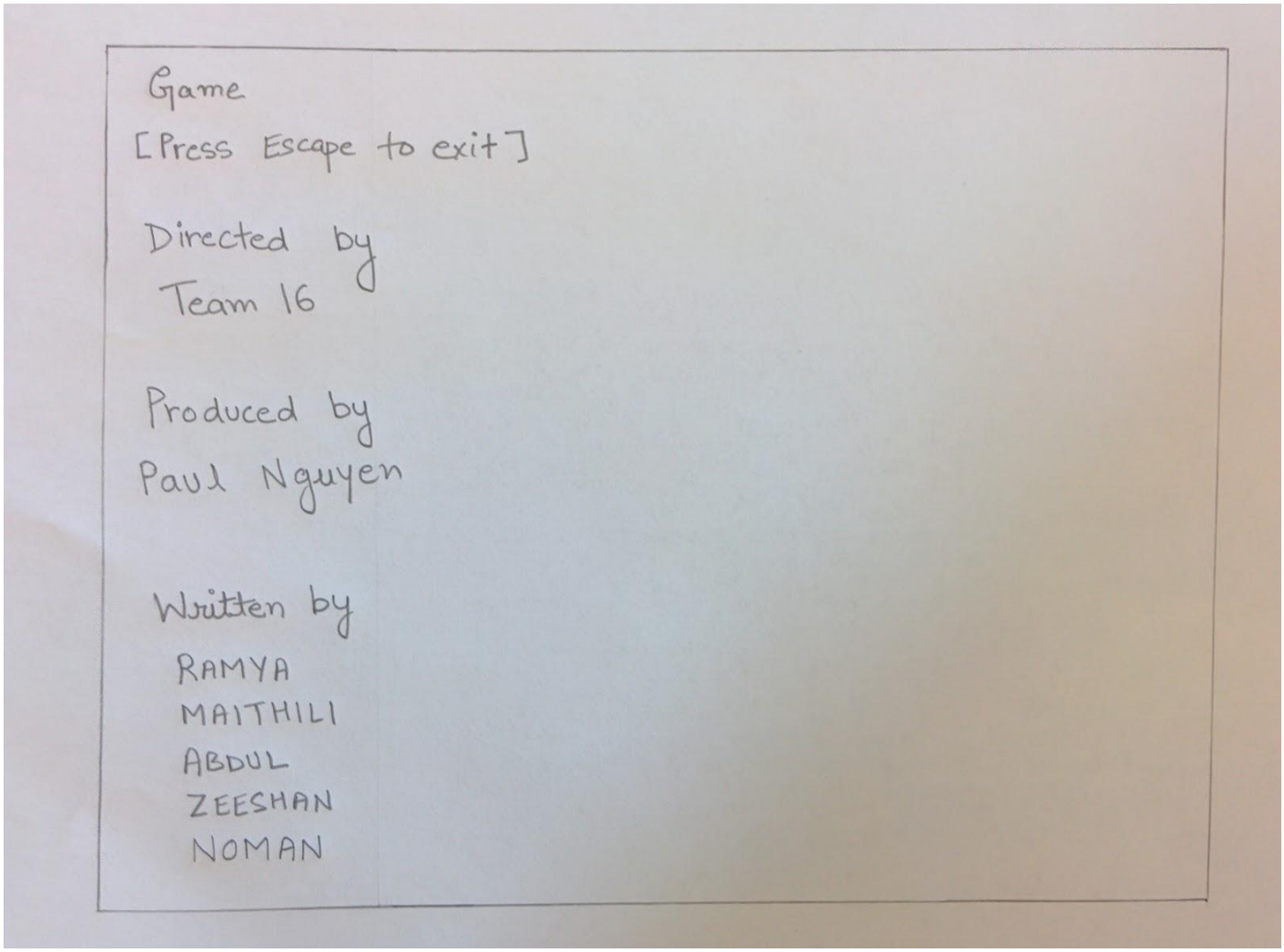
Start Screen



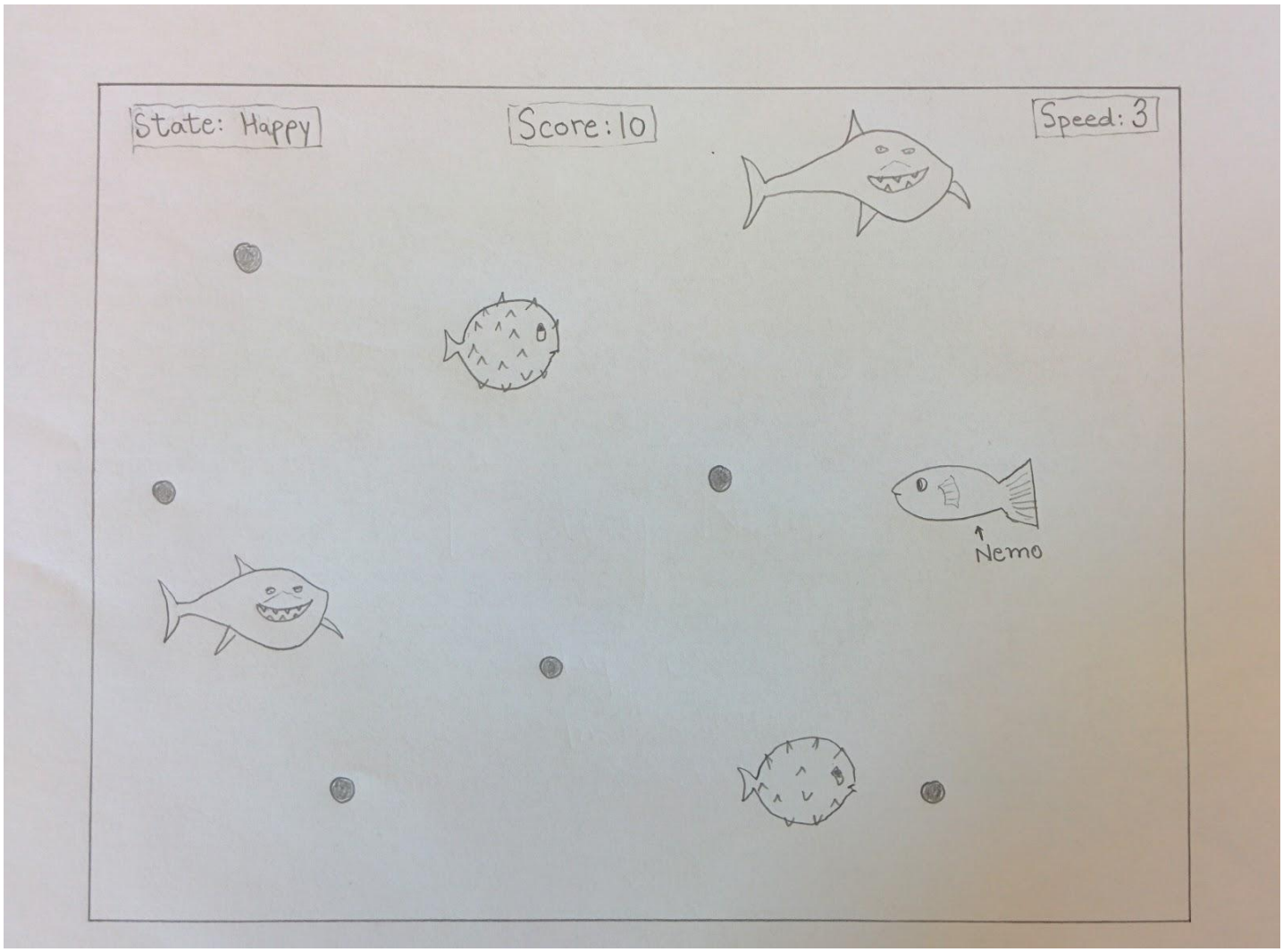
Instructions Screen



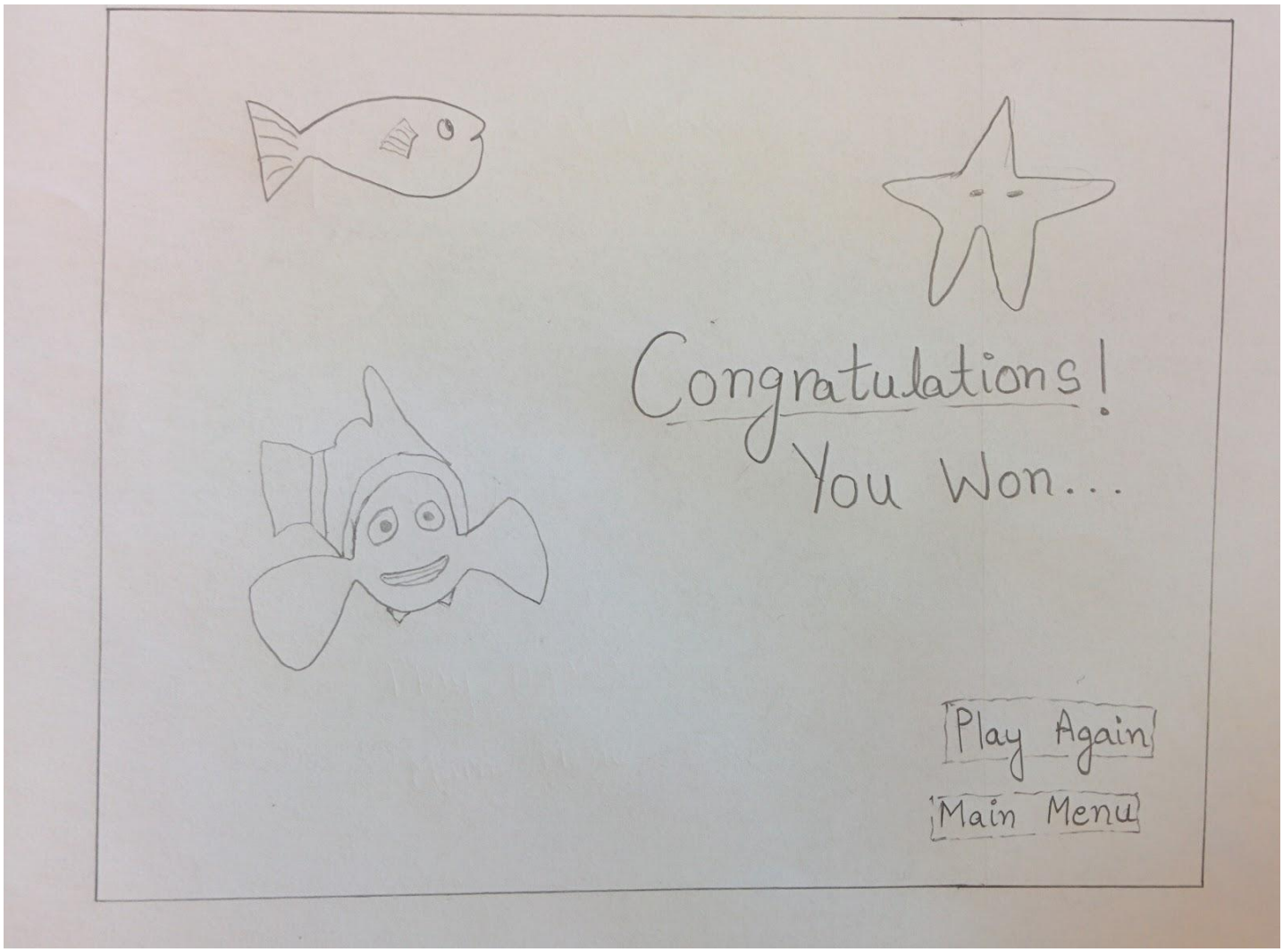
Credits Screen



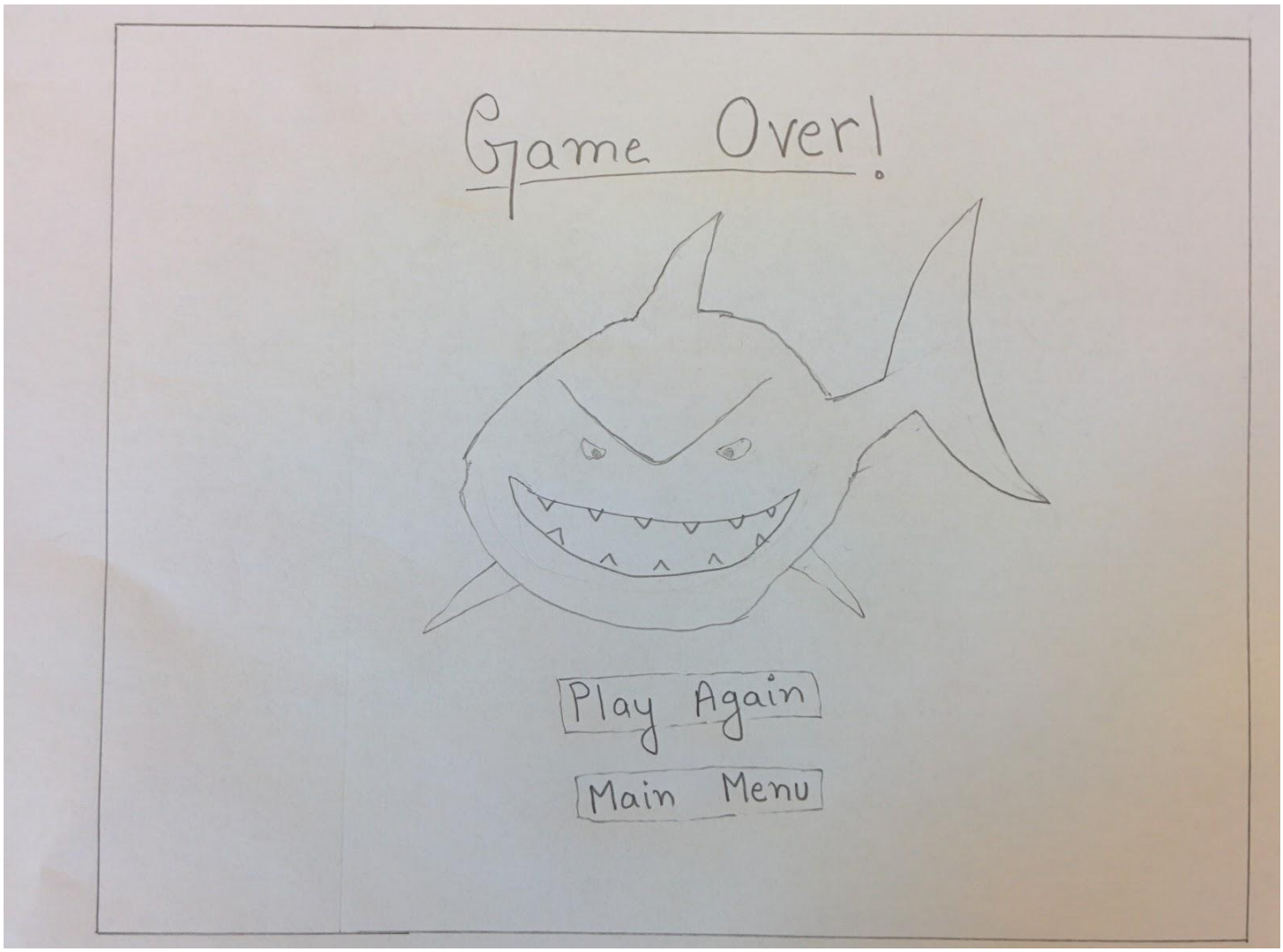
Game Screen



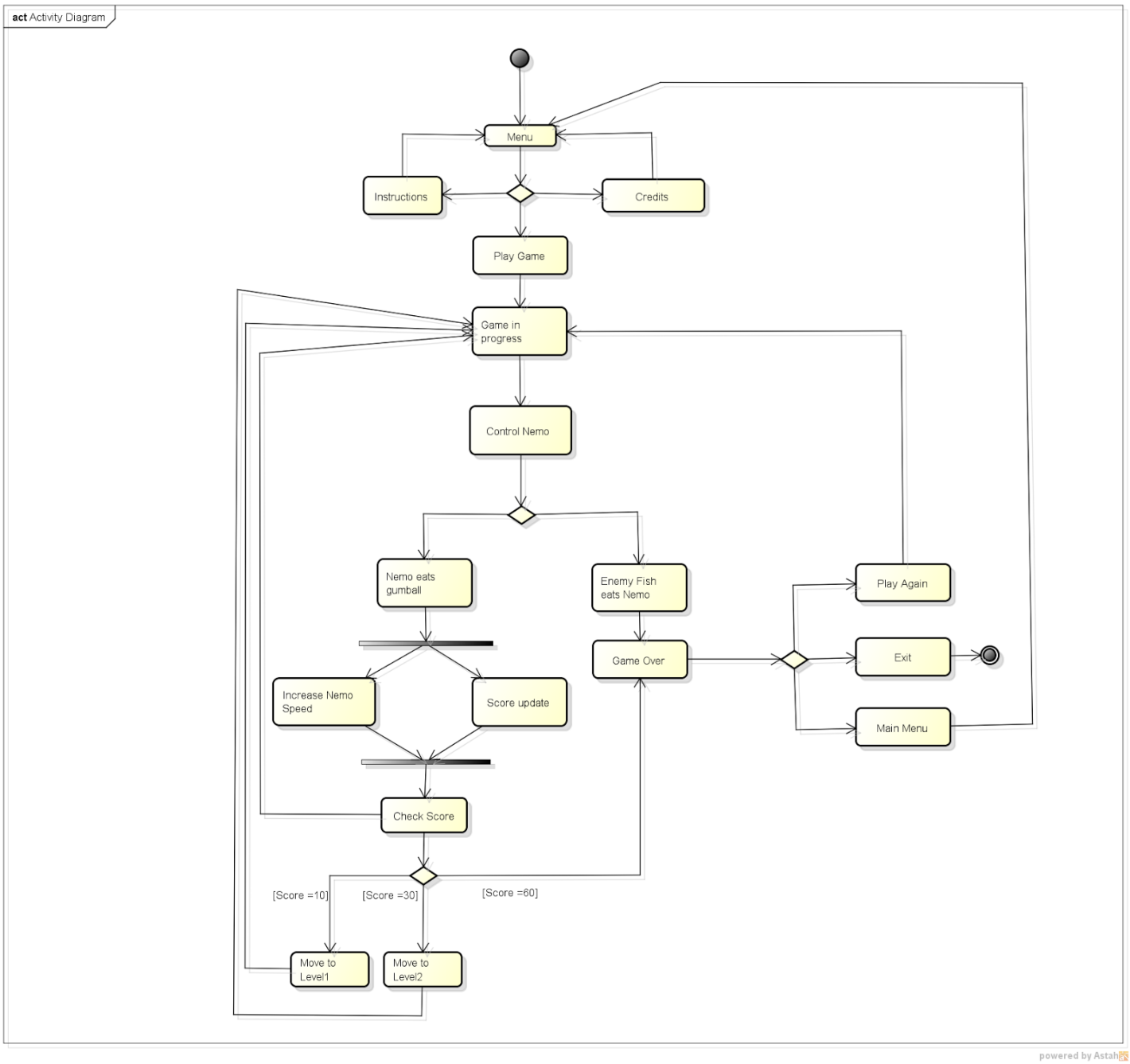
Winning Screen



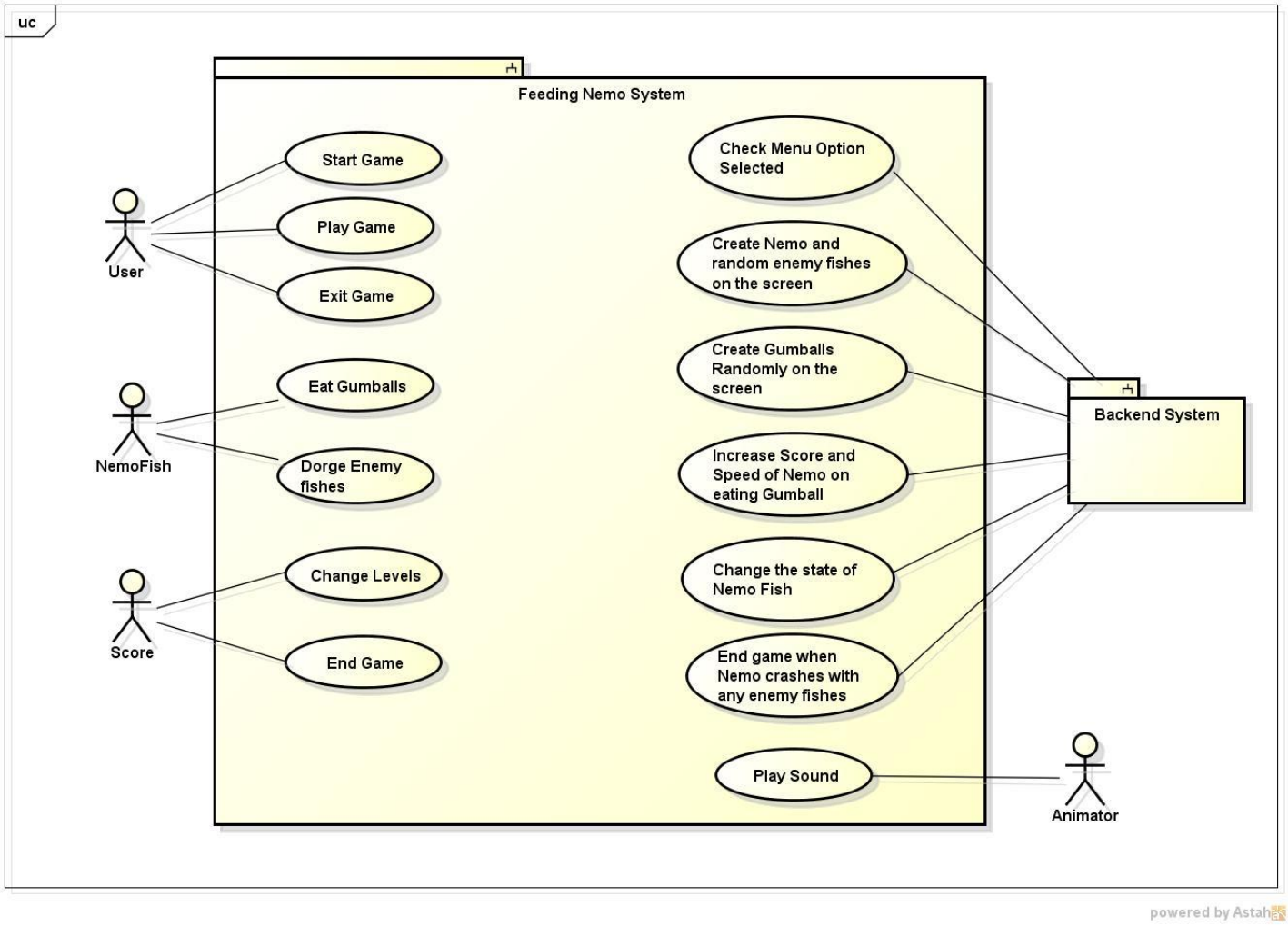
Losing Screen



Activity Diagram:



Use Case Overview Diagram:



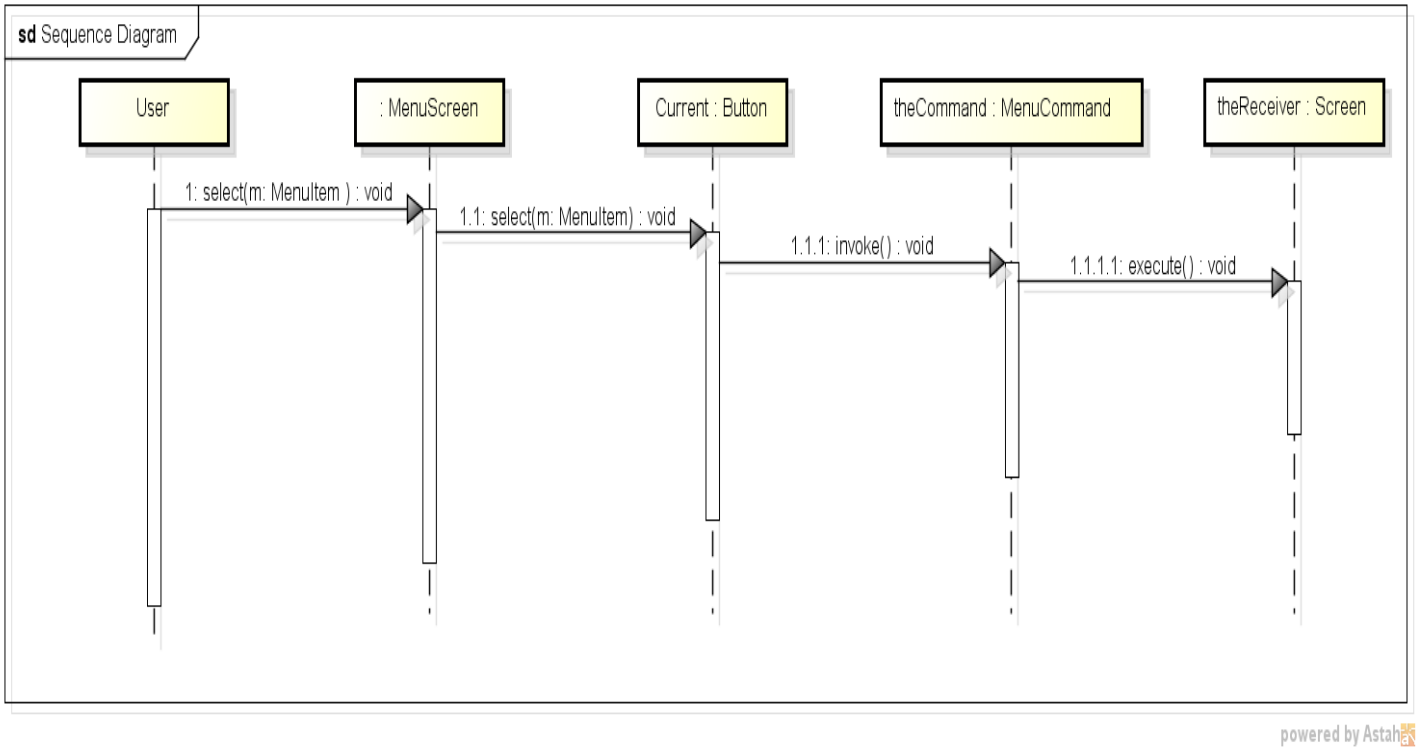
Use case Specification with Supporting Sequence Diagrams:

Requirement A.1

The player starts Feeding Nemo Game by clicking on Start Game Button.

Use Case Name	**Start Feeding Nemo Game**	
Related Requirements	Requirement A.1	
Goal in context	The player starts Feeding Nemo Game by clicking on Start Game Button.	
Preconditions	The player should launch the game.	
Successful End Condition	The game is started.	
Failed End Condition	The game is not started.	
Primary Actors	Player	
Secondary Actors	Backend System	
Trigger	Player clicks Play Game button	
Main Flow	**Step**	**Action**
	1	The player clicks on the Play Game button.
	2	Game is started.
Extensions	2.1	Game is not started.

Sequence Diagram for Requirement A.1:

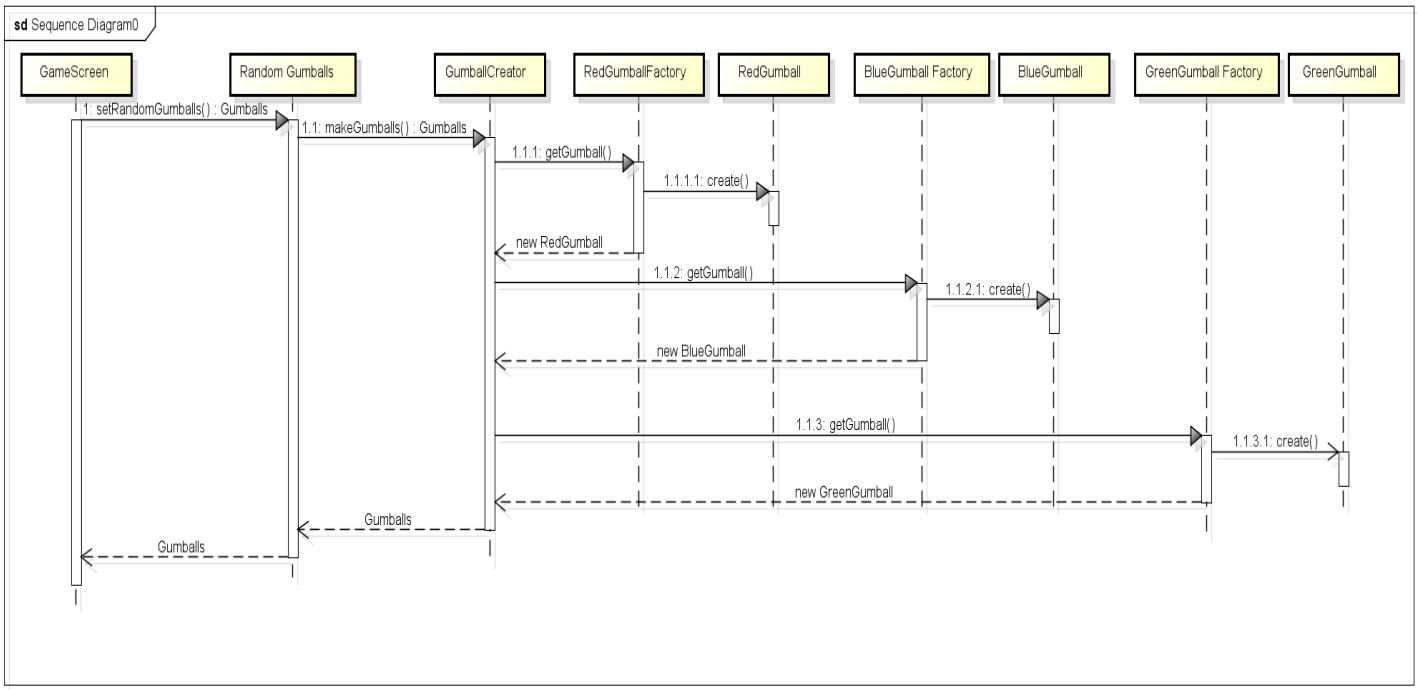


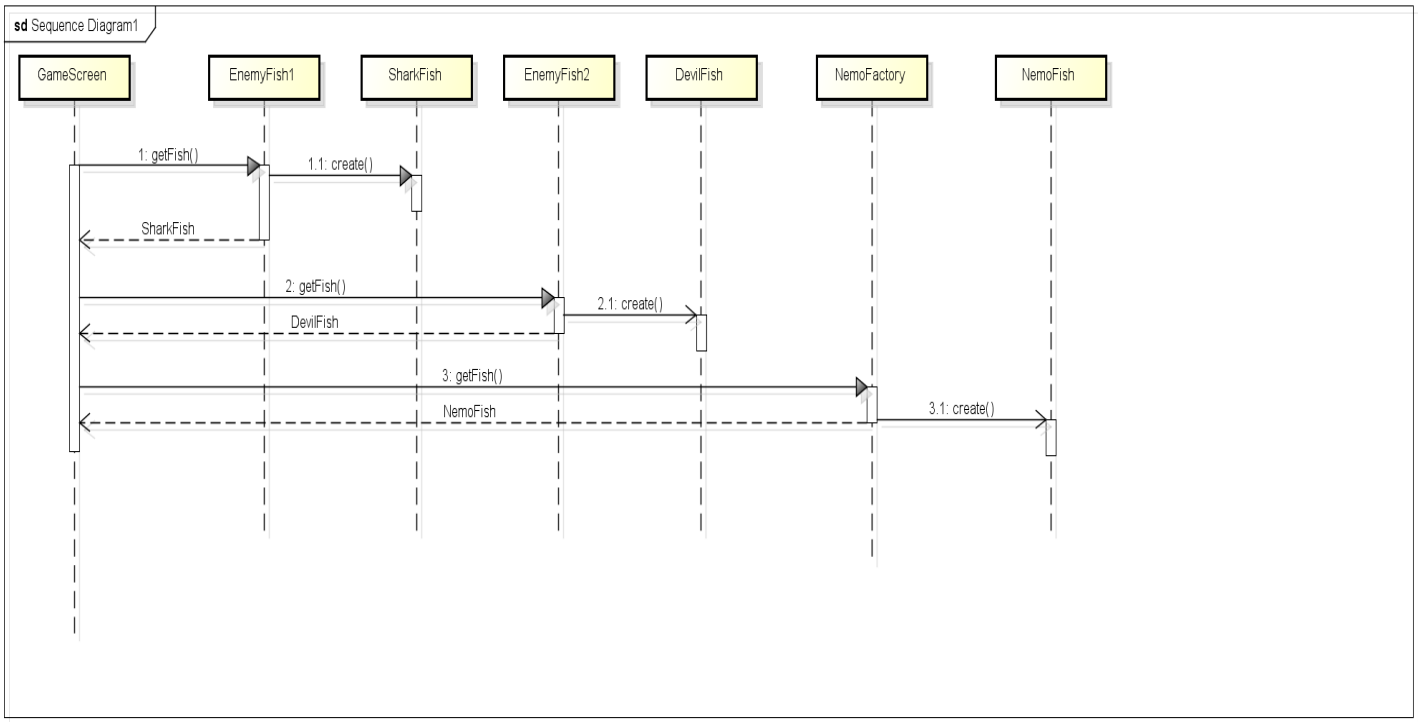
Requirement A.2

After the player clicks on the Start game button, the game is started. The enemy fishes and gumballs appear randomly on Game screen.

Use case Name	**Add enemy , Nemo fish and gumball objects on game screen**	
Related requirements	Requirement A.2	
Goal in context	On Game screen, the Nemo fish should move and bounce. The enemy fishes and gumballs should appear randomly on screen.	
Preconditions	The player should click on start game button.	
Successful End Condition	The enemy fishes, Nemo fish and gumballs appear on screen.	
Failed End Condition	The player does not click on Start Game button.	
Primary Actors	Nemo Fish, Enemy Fishes, Gumballs	
Secondary Actors	Supporting system	
Trigger	Enemy fishes move on screen. Gumballs appear at random position on screen. Nemo moves in the Game screen.	
Main Flow	**Step**	**Action**
	1	Game is started
	2	Enemy Fishes appear randomly
	3	Gumballs appear randomly
	4	Nemo moves

Sequence Diagrams for Requirement A.2:



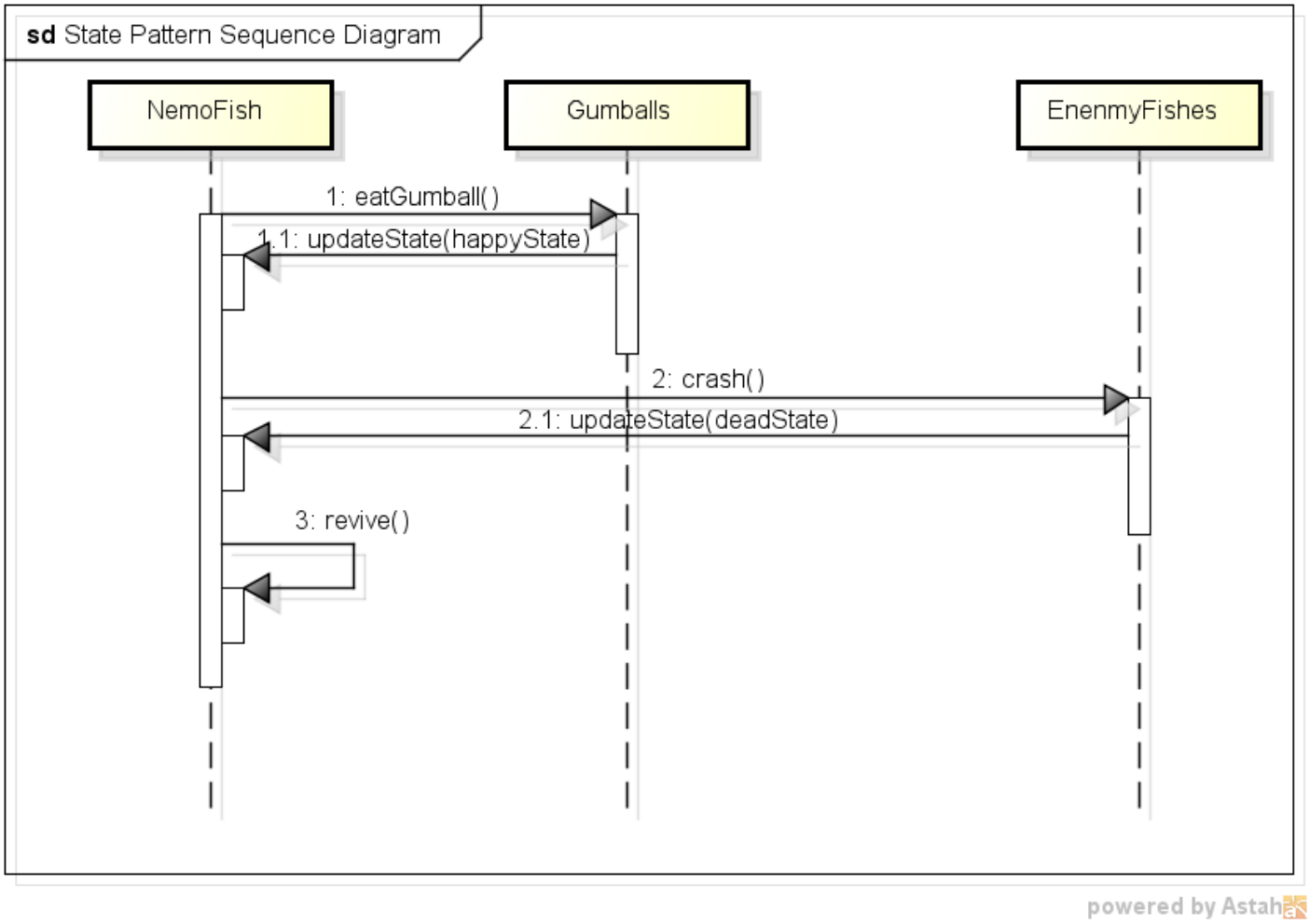


Requirement A.3

Nemo changes its state and thereby the speed depending upon the number of gumballs eaten or by crashing into other enemy fishes.

Use Case Name	**Change Nemo's State**	
Related Requirements	Requirement A.4	
Goal in context	Change Nemo's State by increasing its state when it eats a gumball or crashes with enemy fishes.	
Preconditions	Nemo is not Dead.	
Successful End Condition	Nemo's State is updated along with its speed when triggered.	
Failed End Condition	Nemo remains in same state even after getting triggered to change the state.	
Primary Actor	Nemo	
Secondary Actors	State and Speed	
Trigger	1. Nemo eats a gumball. 2. Nemo crashes with an enemy fish.	
Main Flow	**Step**	**Action**
	1	Nemo moves around and eats a gumball.
	2	Nemo's State is changed from hungryState to happyState and it speed is incremented by 1.
Extensions	1.1	Nemo moves around and crashes with enemy fish.
	1.2	Nemo's State is changed to deadState and the game ends.

Sequence Diagram for Requirement A.3:

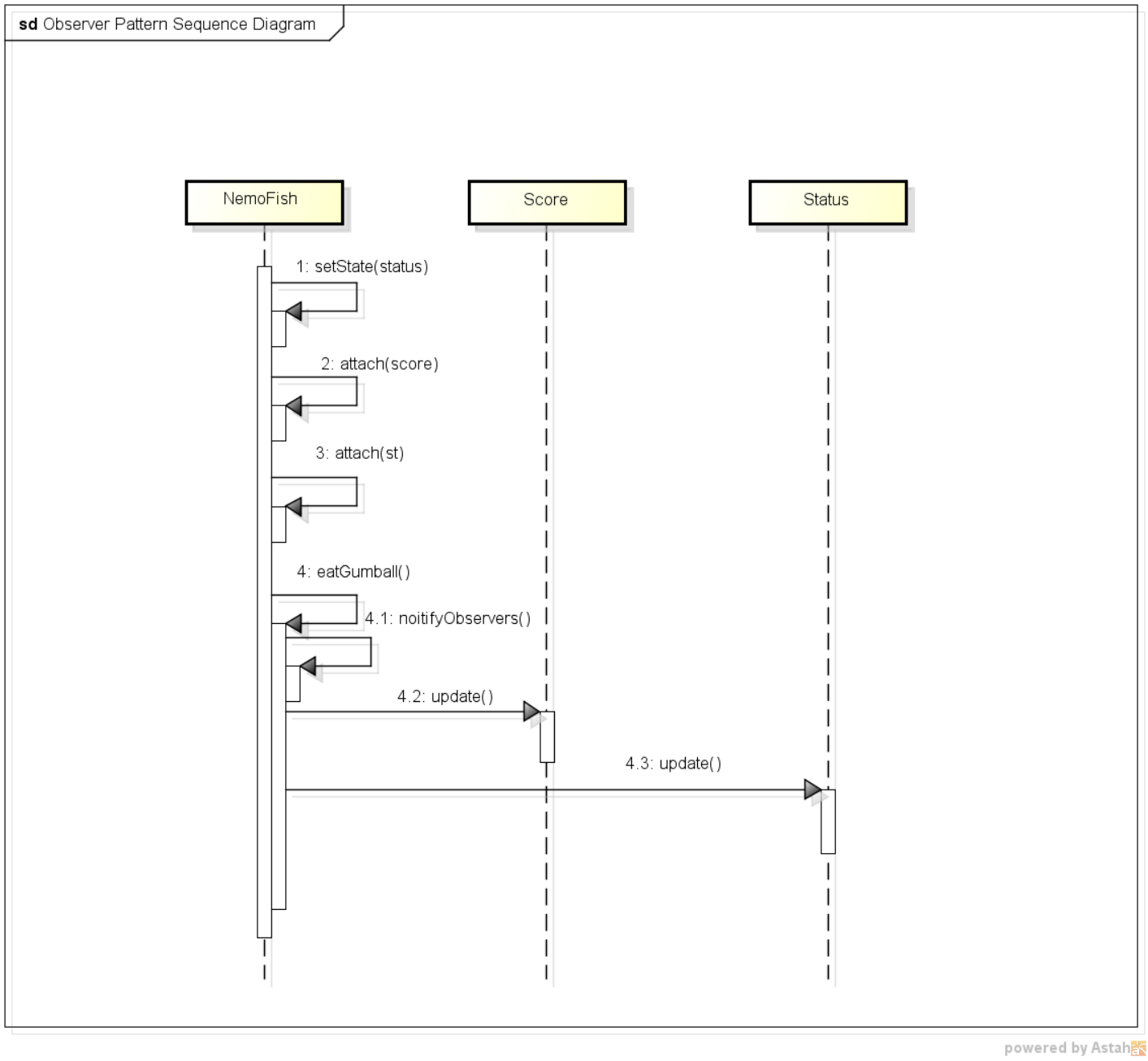


Requirement A.4

Upon the change of Nemo's state by eating gumball(s), score should be updated and updated status needs to be displayed on the screen.

Use Case Name	**Update Score and Status**	
Related Requirements	Requirement A.3	
Goal in context	Update the score and status of Nemo when it starts eating gumball(s).	
Preconditions	Nemo is alive.	
Successful End Condition	Nemo eats at least one gumball successfully.	
Failed End Condition	1. Score is not updated even after Nemo eats a gumball. 2. Status is not updated even after Nemo eats a gumball.	
Primary Actor	Nemo Fish.	
Secondary Actors	Score and status.	
Trigger	Nemo eats gumball(s).	
Main Flow	**Step**	**Action**
	1	Nemo eats a gumball.
	2	Score is increased by 5 points.
	3.	Status is updated to happy state.
Extensions	2.1	Sore remains the same.
	3.1	Status is not updated to happy state.

Sequence Diagram for Requirement A.4:

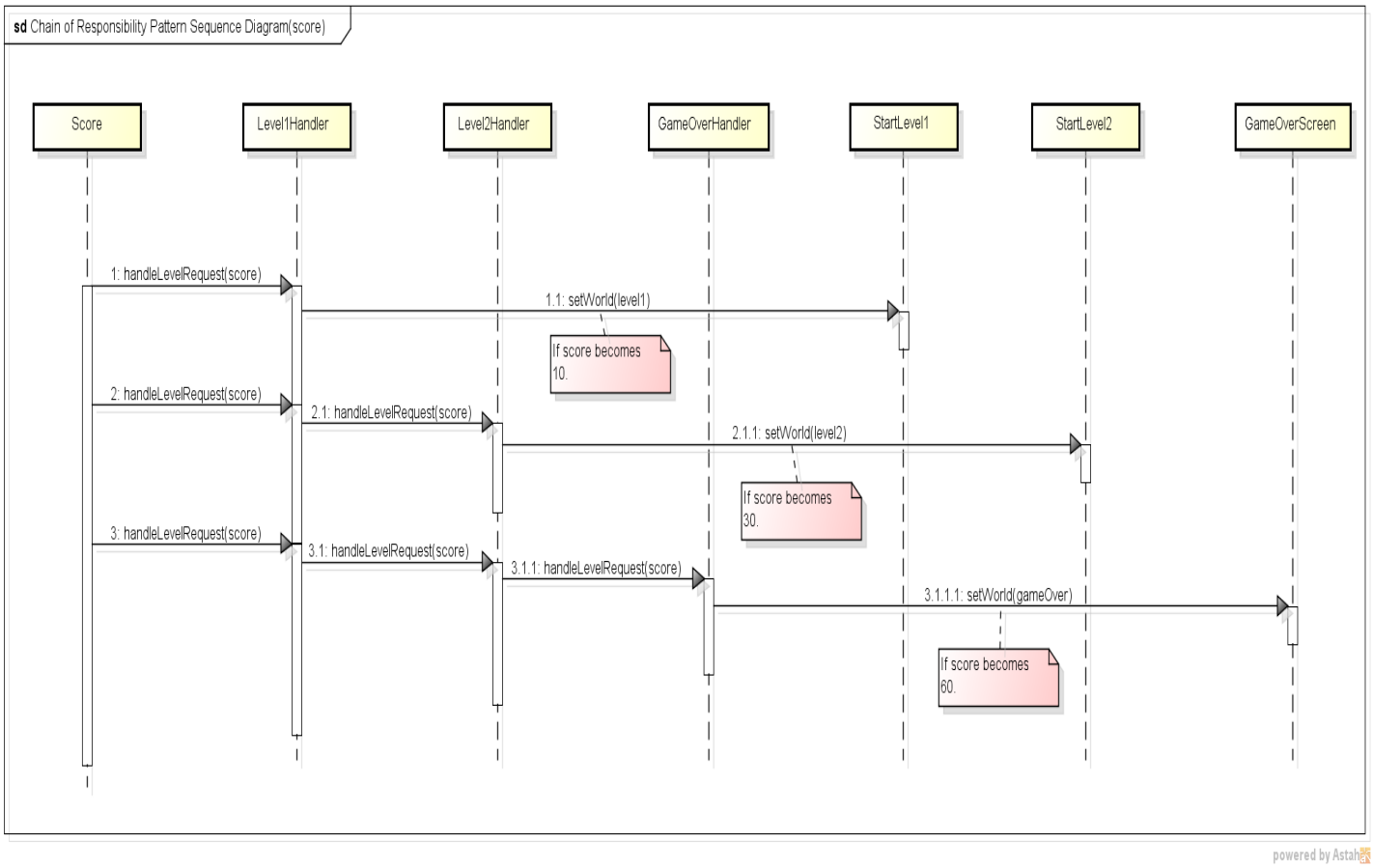


Requirement A.5:

Incorporate multilevel functionality in game and end the game successfully on reaching score=60.

Use Case Name	**Enable multilevel and successful game over**	
Related Requirements	Requirement A.5	
Goal in context	1. Start level 1 when score reaches to 10. 2. Start level 2 when score reaches to 30. 3. End game successfully when score reaches to 60.	
Preconditions	1. Score=10 for Level 1. 2. Score=30 for Level 2. 3. Score=60 for game over.	
Successful End Condition	1. Level 1 started on score=10. 2. Level 2 started on score=30. 3. Game is successfully ended on score=60.	
Failed End Condition	Score doesn't reach to 10, 30 or 60 and Nemo dies.	
Primary Actors	Score	
Secondary Actors	Supporting System,	
Trigger	Score updates	
Main Flow	**Step**	**Action**
	1	Score updates itself by 5 each time when Nemo eats a gumball.
	2	Level 1 starts when score reaches to 10.
	3	Level 2 starts when score reaches to 30.
	4	Game ends successfully when score reaches to 60.
	2.1	Game ends when nemo dies without reaching to score 10.
	3.1	Game ends when nemo dies without reaching to score 30.
	4.1	Game ends when nemo dies without reaching to score 60.

Sequence Diagram for Requirement A.5:



Class Diagram: