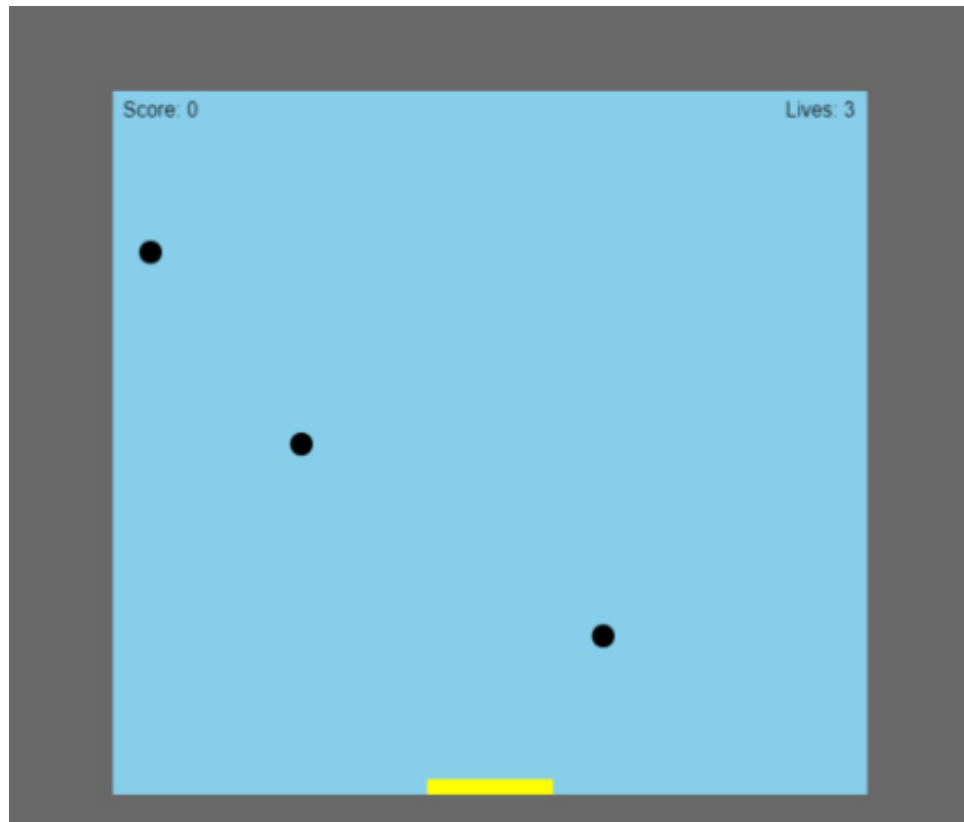


## Lab 3: Conceptual Models

# Ball Out 2



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Group 30

**SOFE 2720U**

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1.

<b>Legend</b>	<u>Nouns</u>	Actors	Irrelevant objects	Objects or Classes of interest	Attributes of objects
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### Scenario: 2-D Game

Ball out 2 is a user friendly simple 2-D game that involves the use of a paddle and a ball. The main objective of the game is to catch as many balls as possible with the paddle. The 2-D game contains many functions like, a ball drop function once the user clicks play, a function to increment the score and a decrementer for the lives of the user. In order to gain access to the 2-D game the player must sign up and login with the username and password that they created. Once the user logs in they will gain access to the homepage of the website. The user can use the navigation bar on the top of the page to navigate through the several pages on the website. Pages like the game instructions pages, 2-D game page and the feedback page. The feedback page is an important component of the site as it allows the user to provide feedback in a form and address any concerns regarding the game. The feedback the user inputs will be stored in the company's database.

2.

Noun Phrases	Object	Attribute	Actors	Irrelevant Objects
Game, paddle, ball-drop, clicks-play, score, lives	Important Concept			
User, player			Important Actors	
Access signup, login	Important Concept			
Username, password		Attributes of login and sign up interface		
Top, page, Homepage, website, navigation bar				Part of the content displayed on the site
form, database	Important Concept			
feedback, inputs, stored		Attribute of Database		

3.

**Class 1:** Game/paddle/ball-drop/clicks-play/score/lives

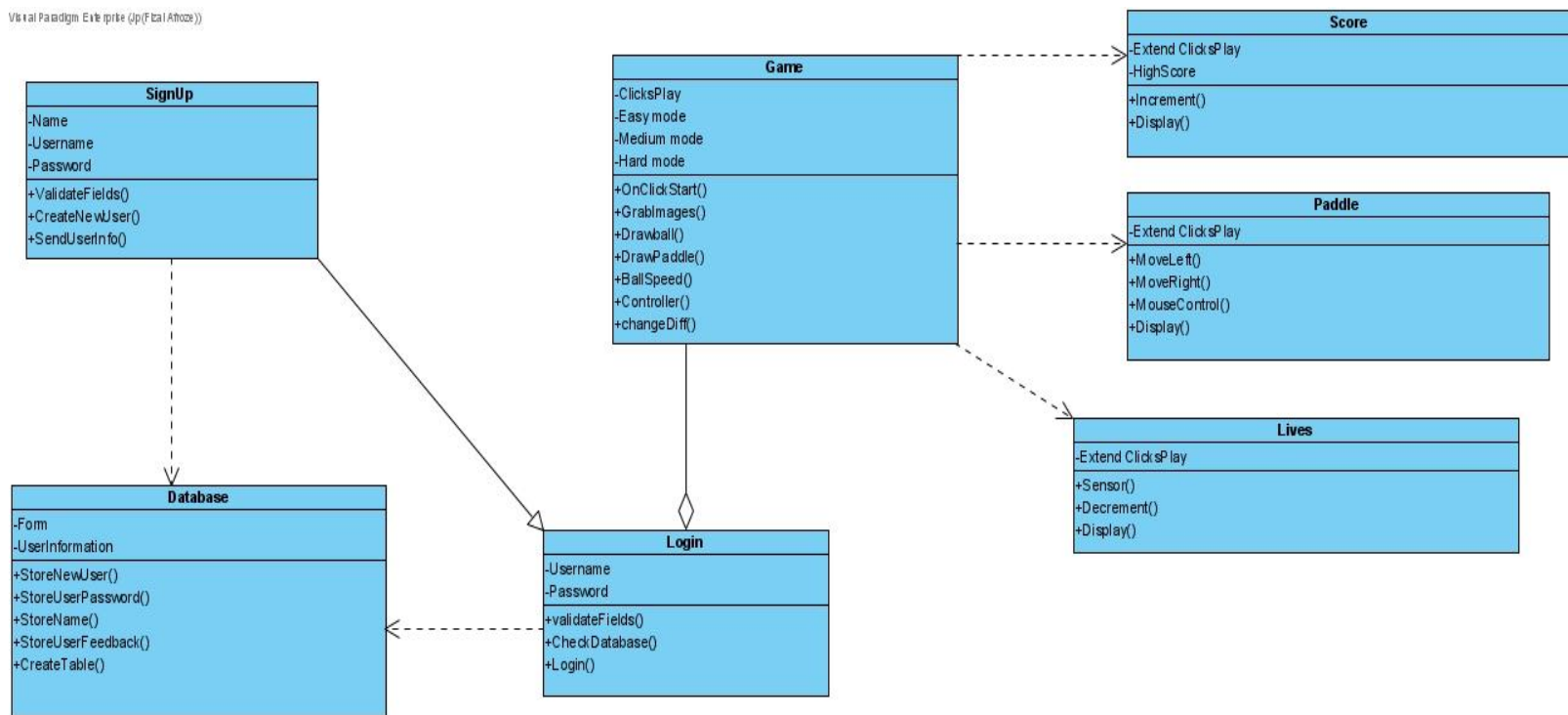
**Class 2:** Signup

**Class 3:** Login

**Class 4:** Database

4. & 6.

Visual Paradigm Enterprise (jp(F ba i Ahoze))



5.

Attribute	Class	Primitive or Object
clicks-play	Attributes of Game class	Primitive
Name, Username, Password	Attributes of Signup class	Object
Username, Password	Attributes of Login class	Object
Form, UserInformation	Attributes of Database	Object

7.

First component	Second Component	Relationship
clicks-play	ball-drop	Onclick the game will start and balls will begin to drop
Signup	Login	Sign up is required to be able to gain access to the login page
Username/password	Database	On submit these fields are validated within the database
Form	Database	All forms must be filled to submit the form and provide feedback

8.

Class	Responsibilities
Signup	Allows any new user to create an account and accept the terms and conditions
Login	Allows the user to login based on their account details that they created during signup
Game	Must display images, drop the balls on click of the play button, must increment the score each time a paddle catches a ball and must decrement the users lives
Database	To store the users account data and any feedback they provide during the exit survey