BATTLESHIP PROJECT: UML Diagrams

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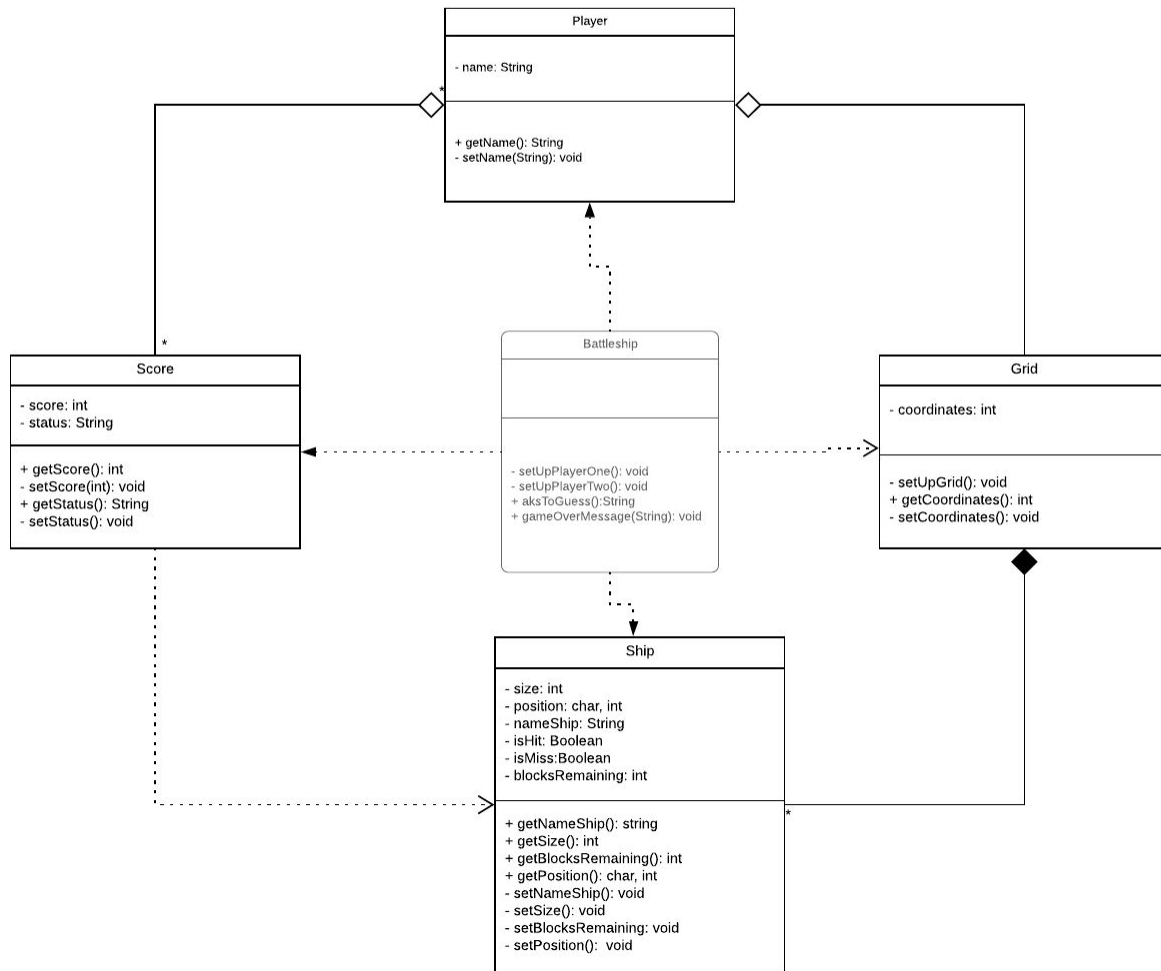

UML Class Diagrams

Player

- name: String

+ getName(): String
- setName(String): void

Score

- score: int
- status: String

+ getScore(): int
- setScore(int): void
+ getStatus(): String
- setStatus(): void

Battleship

- setUpPlayerOne(): void
- setUpPlayerTwo(): void
+ aksToGuess():String
+ gameOverMessage(String): void

Grid

- coordinates: int

- setUpGrid(): void
+ getCoordinates(): int
- setCoordinates(): void

Ship

- size: int
- position: char, int
- nameShip: String
- isHit: Boolean
- isMiss:Boolean
- blocksRemaining: int

+ getNameShip(): string
+ getSize(): int
+ getBlocksRemaining(): int
+ getPosition(): char, int
- setNameShip(): void
- setSize(): void
- setBlocksRemaining: void
- setPosition(): void

add multiplicities
Ship class: hit or miss method

UML State Diagram

Visit website

LOGIN ← CREATE ACCOUNT

Connect With Other User → Tutorial

START GAME

Players Set Up Grid

Player 1's Turn?

Yes → PLAYER 1 TURN → HIT → Update Scores
MISS

No → PLAYER 2 TURN → HIT → Update Scores
MISS

Sunk all opponent's ship

Sunk all opponent's ship

No

All of a player's ships has sunk → Game Over
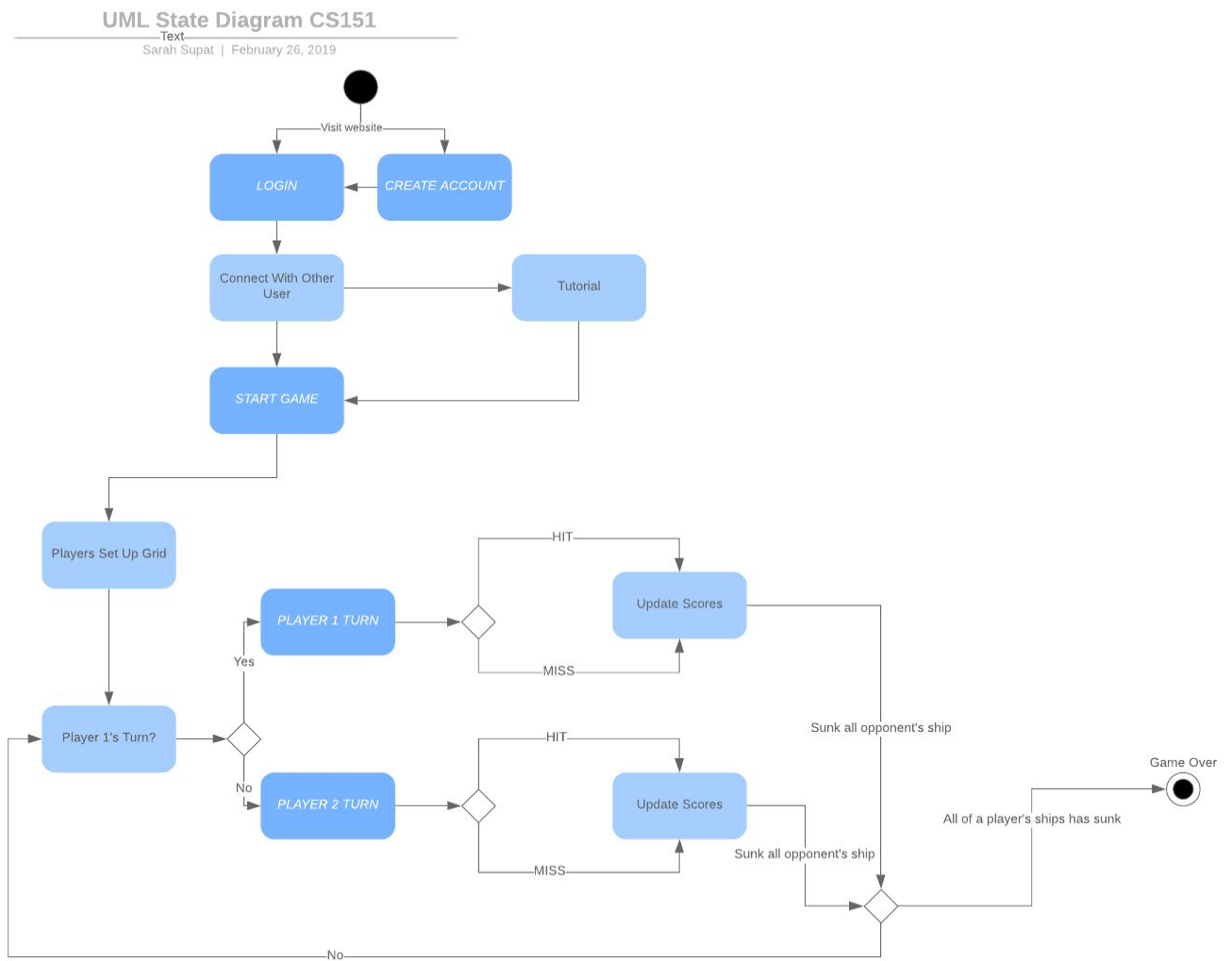
Hit or miss: conditionals, they need to be labels

UML Sequence Diagram

| SHIP | GRID | SCORE | BATTLESHIP |

**USER PLACES
SHIPT ON GRID**

GETPOSITION()

setPosition()

**USER MISS
OPPONENT SHIP**

GETPOSITION()

setPosition()

getScore()

setScore()

**USER HITS
OPPONENT SHIP**

setScore

getScore()

GETPOSITION()

setPosition()

sendGameOver()

**IF HIT ALL SHIPS, SEND GAME
OVER MESSAGE**