

Name: Leo Nelson

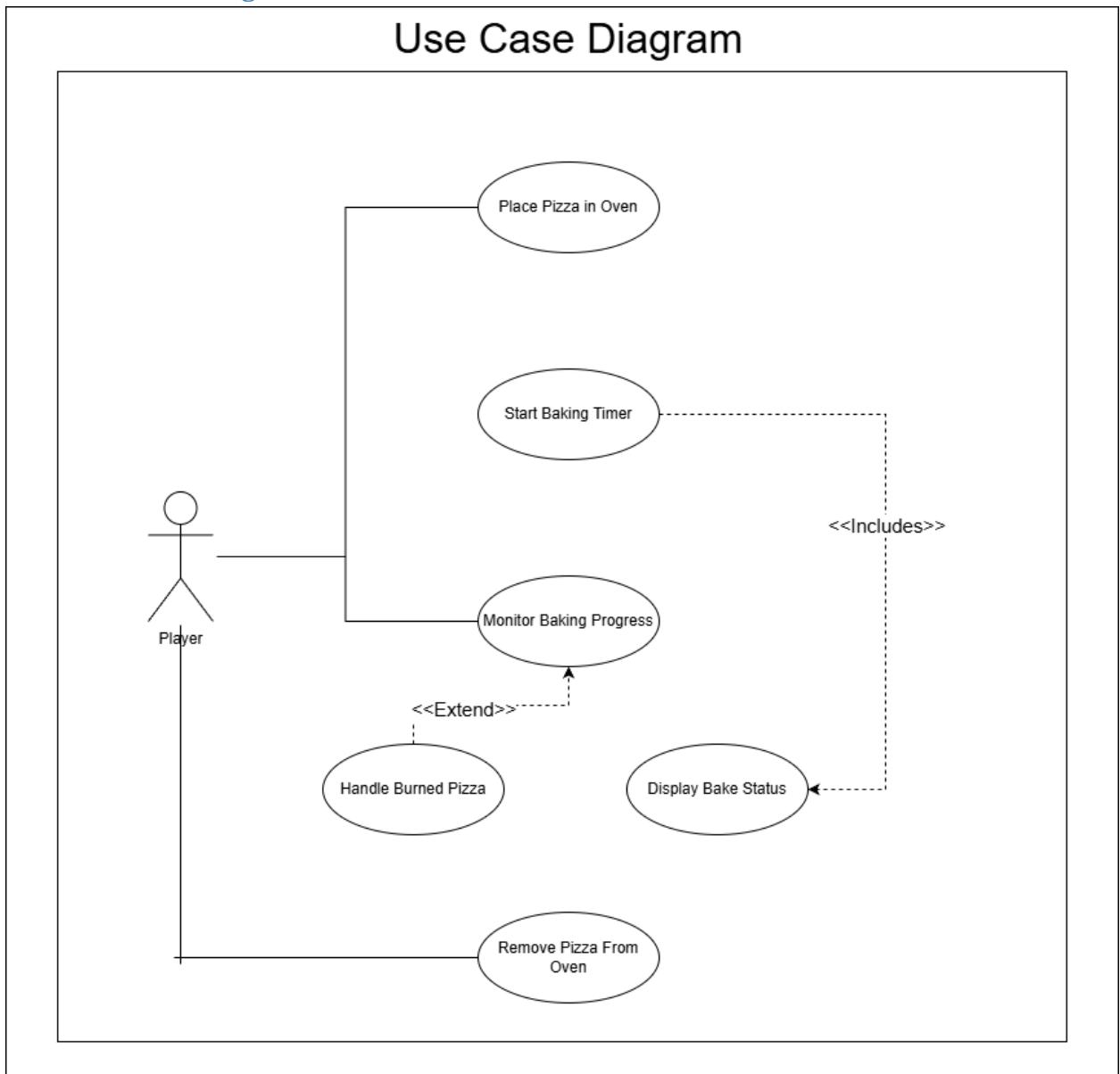
Mark _____/50

1. Brief introduction _/3

The baking feature of ET's Pizzeria controls what happens after the player places the desired toppings onto the pizza. The player will place the pizza into an oven where a timer then tracks the baking progress. There will be visual cues throughout the process, and an audio cue when baking is finished. When baking is complete, the player can click or tap the oven to place the pizza onto a plate, readying it for the next stage of the game. This feature will be a core part of the overall gameplay loop.

2. Use case diagram with scenario _14

Use Case Diagrams



Scenarios

Scenario 1: Bake Pizza

Name: Bake Pizza

ID: B01

Priority: 1

Summary:

The player bakes a pizza prepared in an earlier stage by placing it into the oven and removing it when finished.

Actors:

The Player.

Preconditions:

- The pizza has toppings applied to it
- The oven is available for use
- The pizza is not already baked

Basic Sequence:

1. Player will place pizza onto an open oven
2. The system will start the bake timer
3. System displays a visual bake progress bar
4. Player will monitor pizza bake progress
5. Player will remove the pizza before it gets burnt
6. The system will place the pizza onto a plate

Postconditions:

- Pizza marked as baked
- Pizza advances to plate stage

Scenario 2: Burned Pizza

Name: Burn Pizza

ID: B02

Priority: 2

Exception Trigger:

Player leaves the pizza in the oven for too long after bake timer reaches 100%.

Extended From: Step 4 of Bake Pizza

Exception Steps:

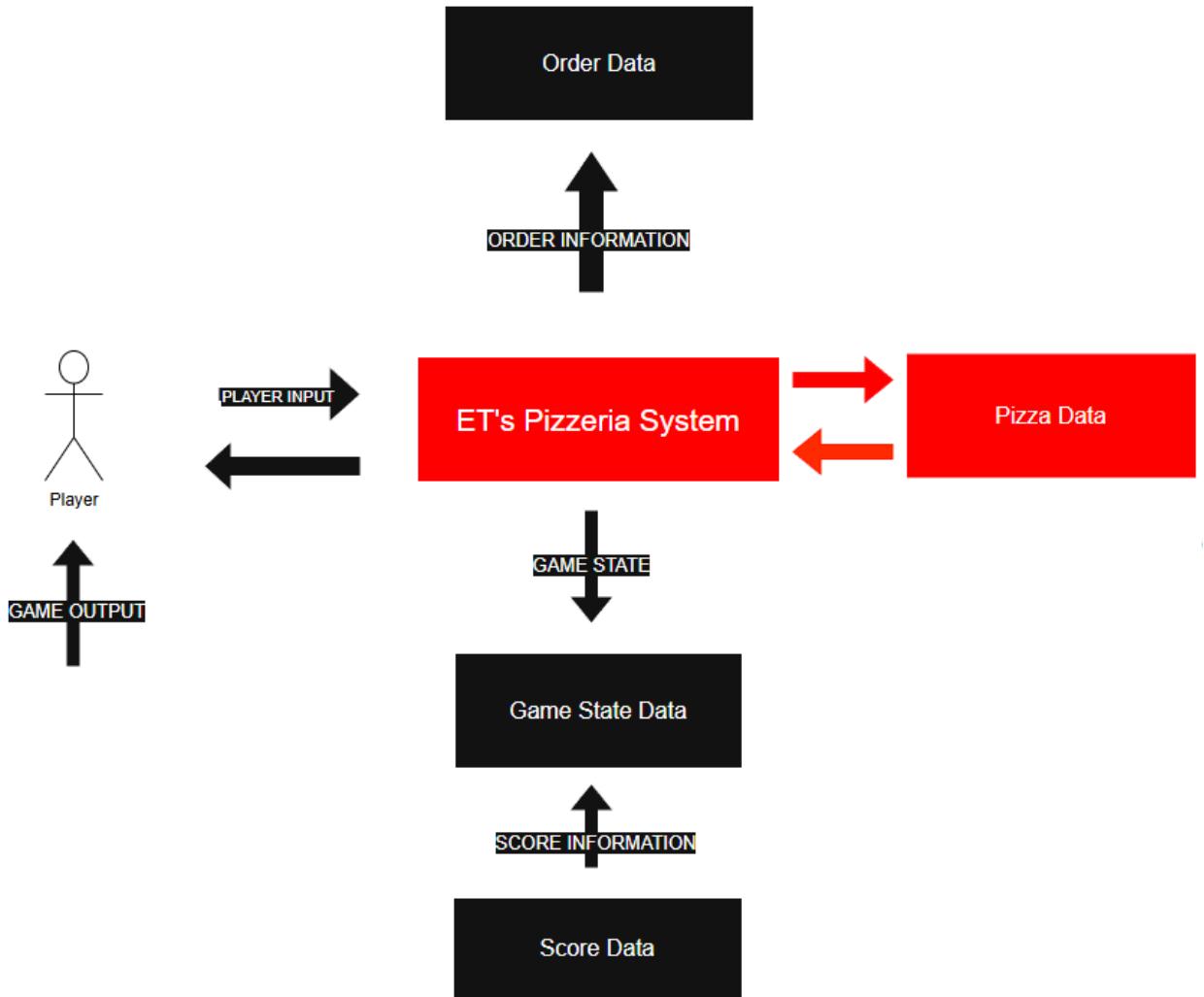
1. Baking timer exceeds acceptable threshold
2. System changes pizza state to burned
3. Visual and audio queue is triggered
4. Pizza score is reduced

Postconditions

- Pizza is burned
- Pizza can still be plated but for less points

3. Data Flow diagram(s) from Level 0 to process description for your feature _____14

Data Flow Diagrams



Highlighted Processes are processes under my control

Process Descriptions

IF pizza is in oven

START timer

WHILE pizza remains in oven

UPDATE bake progress

IF timer exceeds burn threshold

SET pizza state to burned

END IF

END WHILE

SET pizza state to baked

STORE updated pizza date

END IF

4. Acceptance Tests _____ 9

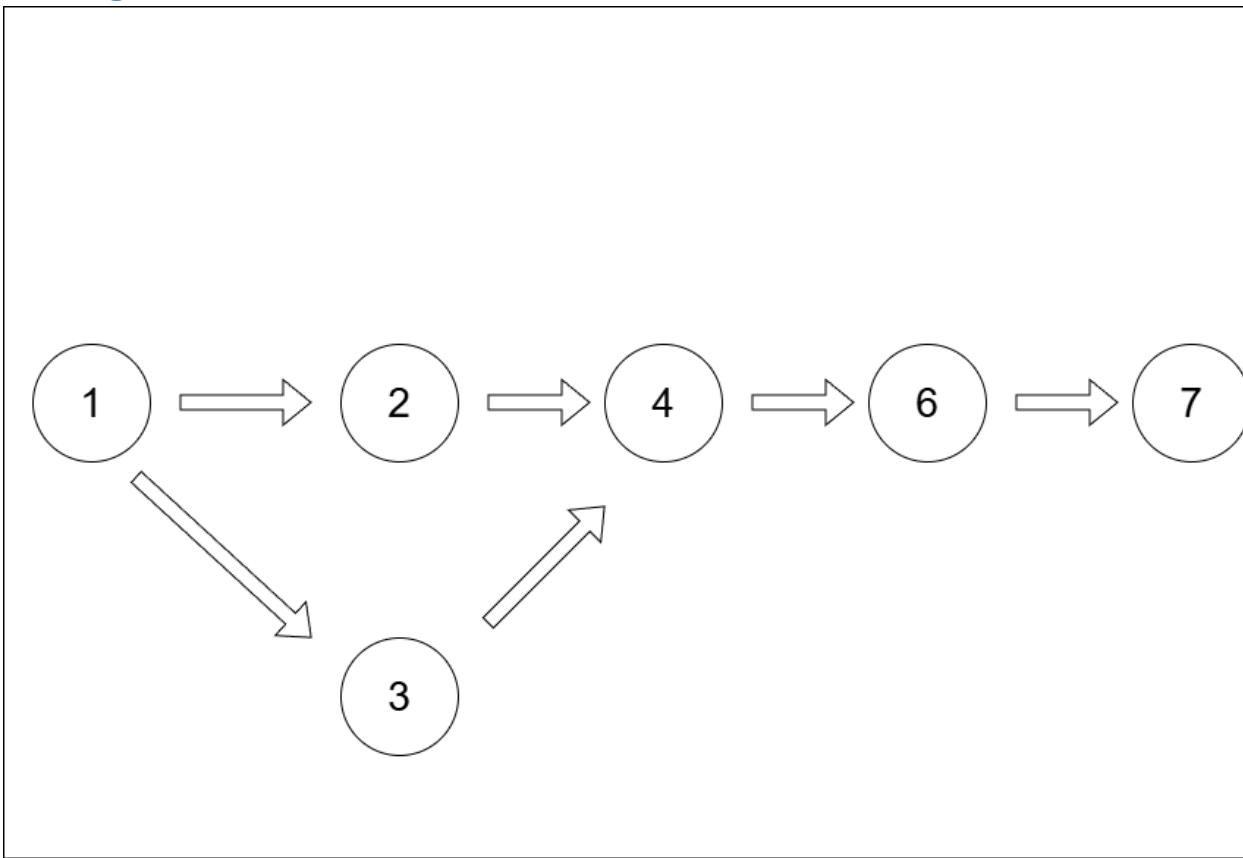
Test-ID	Input	Expected Output	Notes
AT-1	Remove Pizza at optimal time	Perfectly baked pizza	Normal case
AT-2	Remove pizza early	Undercooked pizza	Lower score
AT-3	Remove pizza late	Burned pizza	Burn penalty
AT-4	Do not remove pizza	Auto-burn	Boundary
AT-5	Remove pizza at burn threshold	Acceptable bake	Edge Case

Timeline _____ /10

Work items

Task	Description	Duration (PWks)	Predecessor
1	Baking Requirements	2	-
2	Oven UI Design	2	1
3	Timer Logic Design	2	1
4	Baking Implementation	3	2, 3
5	Visual Feedback	2	4
6	Testing & Balancing	2	4
7	Documentation	1	6

Pert diagram



Gantt timeline

Weeks -->	1	2	3	4	5	6	7	8
T1 Req								
T2 UI								
T3 Logic								
T4 Impl.								
T5 Visual								
T6 Testing								
T7 Docs								