Thomas Loo Terminal App – T1A3

Coder Academy Assignment
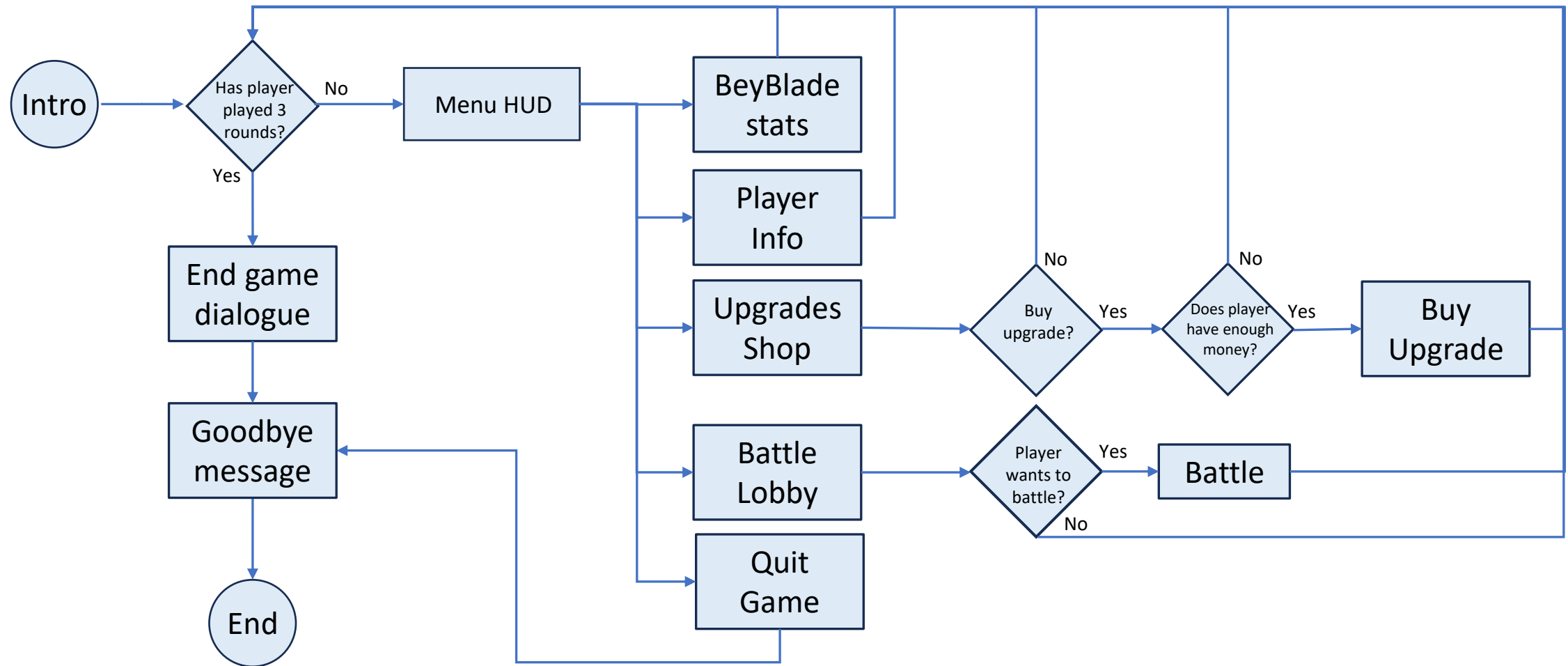Due date: 29 October 2023

Contents

Introduction

- Terminal text-based game

- Game lore: BeyBlade battle tournament simulator set on an international stage that the player has flown in to compete in

- Players interact with game with keyboard input choices

- Player acquires BeyBlade with randomised stats

- BeyBlade stats can be upgraded at the upgrade store

- Player can battle a randomly generated opponent with their own respective BeyBlades

- Win condition: player must win 2 out of 3 rounds and have enough money left over to fly home

Game - Flowchart

Game – Intro dialogue

2023 BATTLE BEYBLADE BONANZA

Welcome to the 2023 Battle BeyBlade Bonanza!
Before we get started, could we please have your name for registration?
Coder

Thank you for registering Coder! We are so glad to have you here!

As per the tournament rules, you will be renting one of our Tournament BeyBlades!
What would you like to name your BeyBlade?
Academy

Here is your Tournament BeyBlade ~ Academy ~ with a total power of 375!
It appears that your BeyBlade favours STAMINA upgrades!

TOURNAMENT RULES:
- 3 round tournament
- To win you will need to win at least 2 out of 3 rounds AND
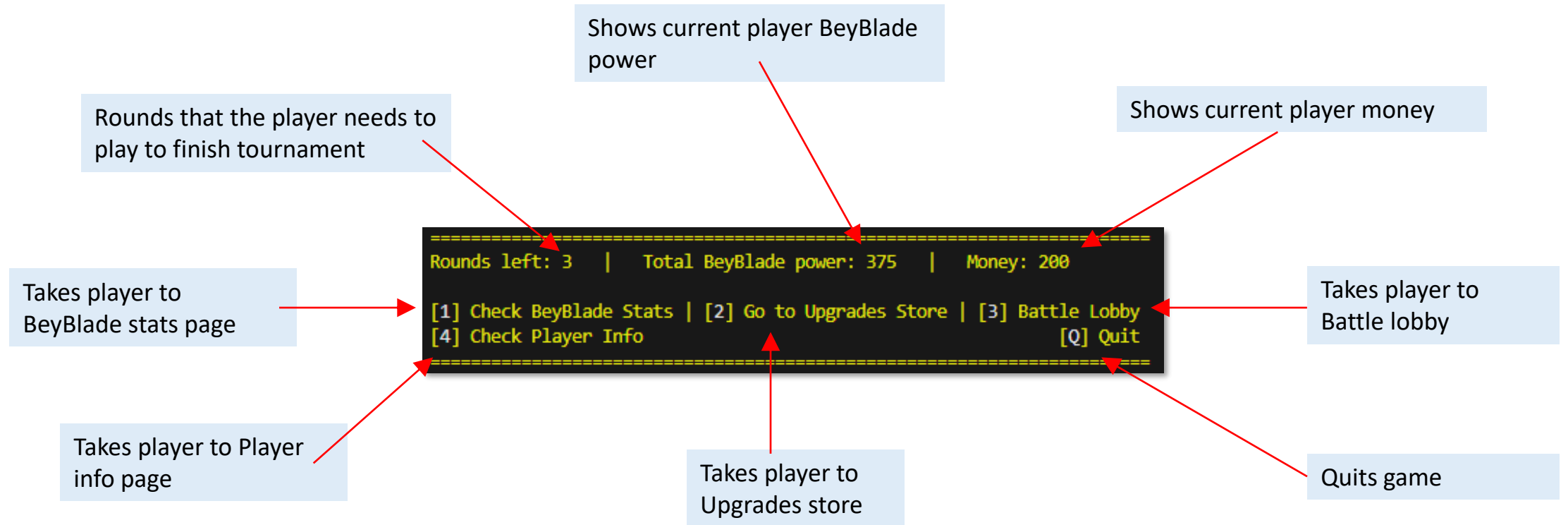- Have 182 dollars left in the bank to fly home!

Goodluck!

User input

Player object created when running the game

BeyBlade object created when Player object created

BeyBlade has randomly generated stats and stat modifiers. Will show player the highest stat modifier to hint which upgrades give the most benefit

Randomly generated money target requirement so that player can fly home

Game – Menu Heads-up Display

Shows current player BeyBlade power

Rounds that the player needs to play to finish tournament

Shows current player money

Takes player to BeyBlade stats page

Takes player to Battle lobby

```
==============================================================================
Rounds left: 3    |    Total BeyBlade power: 375    |    Money: 200

[1] Check BeyBlade Stats | [2] Go to Upgrades Store | [3] Battle Lobby
[4] Check Player Info                                          [Q] Quit
==============================================================================
```

Takes player to Player info page

Takes player to Upgrades store

Quits game

Game – BeyBlade Stats page

Shows name player has given to their BeyBlade during intro

Shows generated BeyBlade stats

Shows which stat upgrades will work best on this BeyBlade

```
Your BeyBlade stats:

Name: Academy
STRENGTH: 90
SPEED: 85
STAMINA: 90
Total power: 346

Your BeyBlade favours STRENGTH upgrades
(Your BeyBlade has hidden unique stat modifiers that we can't check!)

Go to the store to upgrade your stats!

==============================================================
Rounds left: 3   |   Total BeyBlade power: 346   |   Money: 200

[1] Check BeyBlade Stats | [2] Go to Upgrades Store | [3] Battle Lobby
[4] Check Player Info                                      [Q] Quit
==============================================================
```

Game – Player Info page

Shows:
- Player name
- BeyBlade name
- Current money
- Target money to fly home
- Win counter


```
INFO

Player Information:

Name: Coder
BeyBlade: Academy
Money: 200
Money needed to get home: 216
Wins: 0


===============================================================
Rounds left: 3   |   Total BeyBlade power: 346   |   Money: 200

[1] Check BeyBlade Stats | [2] Go to Upgrades Store | [3] Battle Lobby
[4] Check Player Info                                    [Q] Quit
===============================================================
```

Game – Upgrades Store page

Gives user option to buy one stat upgrade from the store

Stat upgrade value is random

Prices are randomly generated upon refresh

```
UPGRADES

** Welcome to the UPGRADES shop! **

[A] Buy STRENGTH stat upgrade: 29 dollars
[B] Buy SPEED stat upgrade: 18 dollars
[C] Buy STAMINA stat upgrade: 26 dollars

=================================================
Rounds left: 3   |   Total BeyBlade power: 346   |   Money: 200

[1] Check BeyBlade Stats | [2] Go to Upgrades Store | [3] Battle Lobby
[4] Check Player Info                                   [Q] Quit
=================================================
```

Confirms to player which stat they bought

Upgrades BeyBlade stat

Subtracts money from player money

```
You bought a STRENGTH upgrade!

=================================================
Rounds left: 3   |   Total BeyBlade power: 414   |   Money: 171

[1] Check BeyBlade Stats | [2] Go to Upgrades Store | [3] Battle Lobby
[4] Check Player Info                                   [Q] Quit
=================================================
```

Only allows 1 shop visit per round

```
Sorry, the shop has closed for the day!
```

Game – Battle Lobby page

Randomly picked name from list of opponents

Shows player upcoming opponent and opposing BeyBlade's total power

Gives option to not battle and go to the store for upgrade (if not already visited)

Opponent BeyBlade object created with randomly generated stats

```
BATTLE

Your opponent is Ron Weasley. Their BeyBlade has a total power of 379.
Do you want to battle? (Y or N)
```

Highest total power wins battle

Awards randomly generated money amount if player wins

```
Your opponent is Ron Weasley. Their BeyBlade has a total power of 356.
Do you want to battle? (Y or N)
y


=========================== BATTLING ============================

Academy has won the battle!
You get $43 for winning this round!

================================================================
Rounds left: 2  |  Total BeyBlade power: 447  |  Money: 218

[1] Check BeyBlade Stats | [2] Go to Upgrades Store | [3] Battle Lobby
[4] Check Player Info                                        [Q] Quit
================================================================
```

If player leaves Battle Lobby and returns to Battle Lobby, they will still have to battle the same generated opponent before progressing

```
You have to beat Chris Phenalthamakhunam (Total power: 393) first before battling someone else!
Do you want to battle? (Y or N)
```

Game – End Game page

That's the end of the tournament!

Mock Player 1 and Mock_Beyblade
2023 Champions

Congratulations! You take home the trophy!
Have a safe flight home!

Win tournament +
have enough
money to fly home

That's the end of the tournament!

Mock Player 3 and Mock_Beyblade
2023 Champions

Congratulations! You get the trophy but you don't have enough money to fly home!
I've got an Auntie that runs a fish and chip shop in town if you need to make a bit of money..?

Win tournament +
NOT enough
money to fly home

That's the end of the tournament!

Unfortunately you didn't win the tournament this time :(
Have a safe flight home, we'll see you next time!

Lose tournament +
have enough
money to fly home

Lose tournament +
NOT enough
money to fly home

That's the end of the tournament!

Yikes, you didn't win the tournament and you don't have enough money to get home.
My brother has 6 children, I heard he's looking for a babysitter...

Game – Graceful exit

Code – Player, BeyBlade and Opponent) objects

```python
# Player object
class Player:
    def __init__(self):
        self.name = ""
        self.beyblade = BeyBlade()
        self.money = 200
        self.playing = True
        self.win_counter = 0
        self.rounds_to_play = 3
        self.upgrades_count = 1
        self.opponents_count = 1
        self.shop_visit = 1
        self.money_target = 0


# Beyblade object
class BeyBlade:
    def __init__(self):
        self.name = ""
        self.strength = self.statRand()
        self.strength_modifier = self.modifierRand()
        self.speed = self.statRand()
        self.speed_modifier = self.modifierRand()
        self.stamina = self.statRand()
        self.stamina_modifier = self.modifierRand()
        self.total_stats = self.get_total_stats()
        self.stat_favour = ""
```

BeyBlade object

Stats + modifiers + stat favour

```python
class Opponent(Player):
    name_list = [
        "Ash Ketchum",
        "Spock",
        "Taylor Swift",
        "Hagrid",
        "Ron Weasley",
        "John Howard",
        "Captain America",
        "Dwight Schrute",
        "Michael Scott",
        "Michael Cera",
        "Danny DeVito",
        "Edward Scissorhands",
        "Britney Spears",
        "Chris Phenalthamakhunam"
    ]

    def __init__(self, name, player):
        super().__init__()
        self.opponents_count -= 1
        self.name = name
        # Stat balancer as rounds progress to give opponent chance of higher
        stats to nudge player into buying upgrade
        stats_list = [
            self.beyblade.strength,
            self.beyblade.speed,
            self.beyblade.stamina,
        ]
        if player.rounds_to_play == 2:
            self.beyblade.strength = max((max(stats_list) * (1 + (random.randint
                (15, 20) / 100))), 150)
        elif player.rounds_to_play == 1:
            self.beyblade.strength = max(((max(stats_list) * (1 + (random.randint
                (20, 30) / 100)))), 200)
```

List of names

Inherit from Player class

Stat balancer

```
class Menu:
    def menu(self):
        while self.playing == True:
            # menu function checks after each input if end game requirements satisfied (rounds_to_play
            == 0)
            if self.rounds_to_play == 0:
                Dialogue.end_game(self)
                break
            else:
                # If game is still in progress then HUD will show
                Menu.hud(self)
                try:
                    # Check player input and call function based on selection
                    choice = input("")
                    if choice not in "1234q":
                        raise InputError()
                    if choice == "1": # BeyBlade stats
                        Dialogue.beyblade_stats(self)
                    elif choice == "2": # Show upgrade store options
                        if self.shop_visit > 0:
                            Upgrades.show_upgrades(self)
                        else: # Only allow 1 shop visit per round, if no shop visits left show below
                        message
                            clear_screen()
                            upgrades_banner()
                            delay_print(green + "Sorry, the shop has closed for the day!\n\n" + colres)
```

Check player is playing

Check if end game has been reached yet

Display HUD

Exception handling

Show BeyBlade stats

Show Upgrade Store

Show message if player already visited store

Code – Menu (2 of 2)

```python
        elif choice == "3":
            clear_screen()
            battle_banner()
            if self.opponents_count > 0:
                # Create new opponent object if player enters the battle lobby
                opponent = Opponent(random.choice(Opponent.name_list), self)
                delay_print(green + "Your opponent is " + colres + white + bright + f"
                {opponent.name}" + colres + green + ". Their BeyBlade has a total power of
                " + white + f"{opponent.beyblade.get_total_stats()}.\n" + colres)
                # Subtract 1 from player opponent count; ensures player cannot refresh
                opponent until win/lose against current opponent
                self.opponents_count -= 1
                Battle.battle_lobby(self, opponent)
            else:
                delay_print(green + f"You have to beat " + white + f"{opponent.name} " +
                green + "(Total power: " + white + f"{opponent.beyblade.get_total_stats()}"
                + green+ ") first before battling someone else!\n" + colres)
                Battle.battle_lobby(self, opponent)
        # Show player stats
        elif choice == "4":
            Dialogue.player_stats(self)
        # Quit game function
        elif choice.upper() == "Q":
            Dialogue.quit_game()
except InputError:
    clear_screen()
    print(green + "This is not a valid selection" + colres)
except KeyboardInterrupt:
    Dialogue.quit_game()
```

- opponent_count check
- Create Opponent object
- Show battle_lobby dialogue
- If Opponent object already created, show this message
- Show battle_lobby dialogue
- Show player stats
- Quit game
- Exceptions

Code – Battle mechanic

Reset counters

Battle "animation"

Win condition

Add to wins

Award money

Draw condition

Add extra round

Lose condition

Lose money

```python
# Battle mechanic
def battle(self, opponent):
    self.rounds_to_play -= 1               # Subtracts 1 from number of rounds player needs to be play
    self.opponents_count += 1              # Allows player to refresh new opponent after battle
    self.upgrades_count = 1                # Allows player to buy another upgrade after battle
    self.shop_visit = 1                    # Allows player to visit shop again after battle
    delay_print_slow(yellow + "\n============================== BATTLING
==============================\n\n" + colres)
    if self.beyblade.get_total_stats() > opponent.beyblade.get_total_stats(): # Win outcome
        self.win_counter += 1                     # Add 1 to player win counter
        win_money = random.randint(25, 65)  # Randomise win awarded money
        self.money += win_money                   # Add awarded money to player money
        delay_print(white + f"{self.beyblade.name.capitalize()} " + green + "has won the battle!\n" +
        colres)
        delay_print(green + f"You get ${win_money} for winning this round!\n\n" + colres)
    elif self.beyblade.get_total_stats() == opponent.beyblade.get_total_stats(): # Draw outcome
        self.rounds_to_play += 1
        delay_print(green + "It's a draw! No money awarded! You'll need to play an extra round!\n\n" +
        colres)
    else: # Lose outcome
        lose_money = random.randint(5, 25)
        self.money -= lose_money
        delay_print(white + f"{self.beyblade.name.capitalize()} " + green + "has lost the battle!\n" +
        colres)
        delay_print(green + f"You give ${lose_money} for losing this round! :(\n\n" + colres)
```

Code – End game

Win and fly home scenario

Win and can't fly home scenario

Lose and can fly home scenario

Lose and can't fly home scenario

```python
# End game dialogue
def end_game(self):
    clear_screen()
    finish_banner()
    delay_print(yellow + "=================================================================\n\n" +
    colres + green + "That's the end of the tournament!\n")
    # Display different message based on player end game stats
    if self.win_counter >= 2 and self.money >= self.money_target:
        trophy(self)
        delay_print(green + "Congratulations! You take home the trophy!\nHave a safe flight home!\n\n"
        + colres)
        Menu.end_game_option()
    elif self.win_counter >= 2:
        trophy(self)
        delay_print(green + "Congratulations! You get the trophy but you don't have enough money to fly
        home!\nI've got an Auntie that runs a fish and chip shop in town if you need to make a bit of
        money..?\n\n" + colres)
        Menu.end_game_option()
    elif self.money >= self.money_target:
        smiley()
        delay_print(green + "Unfortunately you didn't win the tournament this time :(\nHave a safe
        flight home, we'll see you next time!\n\n" + colres)
        Menu.end_game_option()
    else:
        sad_smiley()
        delay_print(green + "Yikes, you didn't win the tournament and you don't have enough money to
        get home.\nMy brother has 6 children, I heard he's looking for a babysitter...\n\n" + colres)
        Menu.end_game_option()
```

```python
from unittest.mock import MagicMock
from classes import *


##################################################################


# OBJECTS SETUP: buy_upgrades function objects used for testing
# Mock BeyBlade object
mock_beyblade = MagicMock()
mock_beyblade.strength = 100


# Mock player object
mock_player = MagicMock()
mock_player.upgrades_count = 1
mock_player.shop_visit = 1
mock_player.money = 200
mock_player.beyblade = mock_beyblade
```

Running:
print(mock_player.__dict__)
print(mock_player.beyblade.__dict__

```
You don't have enough money!

You bought a STRENGTH upgrade!

{'_mock_return_value': sentinel.DEFAULT, '_mock_parent': <MagicMock id='139979842920144'>, '_mock_
name': 'beyblade', '_mock_new_name': 'beyblade', '_mock_new_parent': <MagicMock id='13997984292014
4'>, '_mock_sealed': False, '_spec_class': None, '_spec_set': None, '_spec_signature': None, '_moc
k_methods': None, '_spec_asyncs': [], '_mock_children': {}, '_mock_wraps': None, '_mock_delegate':
 None, '_mock_called': False, '_mock_call_args': None, '_mock_call_count': 0, '_mock_call_args_lis
t': [], '_mock_mock_calls': [], 'method_calls': [], '_mock_unsafe': False, '_mock_side_effect': No
ne, 'strength': 150}
{'_mock_return_value': sentinel.DEFAULT, '_mock_parent': None, '_mock_name': None, '_mock_new_name
': '', '_mock_new_parent': None, '_mock_sealed': False, '_spec_class': None, '_spec_set': None, '_
spec_signature': None, '_mock_methods': None, '_spec_asyncs': [], '_mock_children': {'beyblade': <
MagicMock name='mock.beyblade' id='139979853856576'>}, '_mock_wraps': None, '_mock_delegate': None
, '_mock_called': False, '_mock_call_args': None, '_mock_call_count': 0, '_mock_call_args_list': [
], '_mock_mock_calls': [], 'method_calls': [], '_mock_unsafe': False, '_mock_side_effect': None, '
upgrades_count': 0, 'shop_visit': 0, 'money': 100, 'beyblade': <MagicMock name='mock.beyblade' id=
'139979853856576'>}
```

```python
from unittest.mock import MagicMock
from art import *
from classes import *


################################################################################
#########################

# OBJECTS SETUP:
mock_beyblade = MagicMock()
mock_beyblade.name = "Mock_Beyblade"

# Mock player 1 object for Test 1 (Win tournament and fly home: Wins >= 2 and
player money >= player money target)
mock_player1 = MagicMock()
mock_player1.beyblade = mock_beyblade
mock_player1.name = "Mock Player 1"
mock_player1.money = 250
mock_player1.money_target = 201
mock_player1.win_counter = 2

# Mock player 2 object for Test 2 (Lose tournament and fly home: Wins < 2 and
player money >= player money target)
mock_player2 = MagicMock()
mock_player2.beyblade = mock_beyblade
mock_player2.name = "Mock Player 2"
mock_player2.money = 201
mock_player2.money_target = 200
mock_player2.win_counter = 1
```

```python
# Mock player 3 object for Test 3 (Win tournament and can't fly home: Wins >= 2
and player money < player money target)
mock_player3 = MagicMock()
mock_player3.beyblade = mock_beyblade
mock_player3.name = "Mock Player 3"
mock_player3.money = 199
mock_player3.money_target = 200
mock_player3.win_counter = 2

# Mock player 4 object for Test 4 (Lose tournament and can't fly home: Wins < 2
and player money < player money target)
mock_player4 = MagicMock()
mock_player4.beyblade = mock_beyblade
mock_player4.name = "Mock Player 4"
mock_player4.money = 199
mock_player4.money_target = 200
mock_player4.win_counter = 1
```

Retrospective

Biggest challenges:
- Figuring out how to properly code with the object-oriented programming paradigm
- Not adequately planning how many parts goes into a game, specifically, how many attributes need to be added to be able to create a functioning interactive text-based game

Key takeaways:
- I think I have a better grasp of OOP after tackling this challenge, which was a huge struggle in the lead up to this assignment. I'm proud of myself for being able to push through, learn and research and create a game that followed my development plan (albeit with a few more features than I had initially imagined)
- PEP8 styling is quite a bit more involved than I had though

Favourite part:
- I really enjoyed being able to use a delay_print function throughout the game to make it feel like you are actually playing some classic GameBoy game. It's a simple bit of code that I feel really makes the game feel like a game.

Build Process - Intro
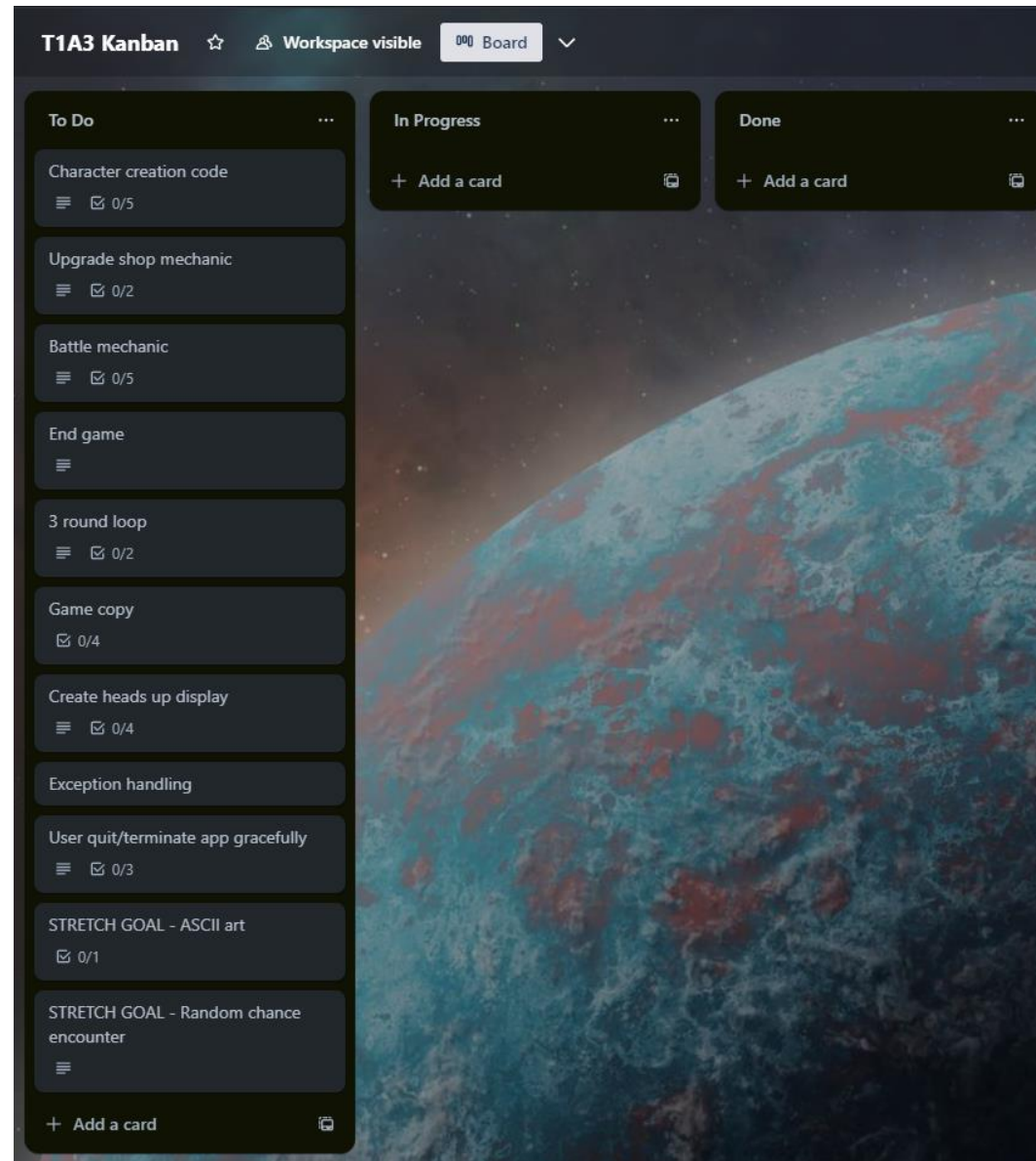
Build Process - Cards

Character creation code
in list Done

Labels
2 story points +

Notifications
👁 Watch

Description   Edit

As a player I want to be able to create a BeyBlade character to play in this game

☑ Checklist   Delete

0% �_____

- ☐ Create BeyBlade object
- ☐ Give starting stats: name, strength, speed, stamina, money
- ☐ Add stat modifiers
- ☐ Randomise starting stats
- ☐ Decide on target money at end of 3 rounds for win requirement
- ☐ Randomise modifiers (hidden to user); give user hint (i.e. "Your BeyBlade seems to respond well to strength upgrades)

Upgrade shop mechanic
in list Done

Labels
5 story points +

Notifications
👁 Watch

Description   Edit

As a player, I want to be able to upgrade the stats of my BeyBlade

Acceptance criteria:

- Present player with list of different upgrades
- Subtract cost of upgrade from player's money
- Upgrade selected stat for BeyBlade

☑ Checklist   Delete

0% �_____

- ☐ Display types of upgrades and randomised cost
- ☐ Allow 1 upgrade per round (subtract from money)

Battle mechanic
in list To Do

Labels
13 story points +

Notifications
👁 Watch

Description   Edit

As a player I want to be able to use my BeyBlade to battle another player

Acceptance criteria:

- Win or lose outcome
- Add or subtract from player's money on win or lose

☑ Checklist   Delete

0% �_____

- ☐ Show current user BeyBlade stats
- ☐ Show opponent BeyBlade stats
- ☐ Ask user READY to commence battle
- ☐ Calculate total power output for each BeyBlade
- ☐ Show winner

Build Process - Cards

End game
in list To Do

Labels
8 story points +

Notifications
👁 Watch

Description   Edit

As a player, after 3 rounds in the tournament, I want to end playing the game

Acceptance criteria:

- Show player end game dialogue, win or lose
- Present stats to user (output to txt file?)

Checklist   Delete

0%
- [ ] Show user win or lose based on win/lose criteria
- [ ] Show overall game stats (reveal stat modifiers)
- [ ] Output stats to output txt file
- [ ] STRETCH GOAL - Create tournament win certificate txt file

3 round loop
in list To Do

Labels
2 story points +

Notifications
👁 Watch

Description   Edit

As a user, I want to play 3 rounds of the tournament against 3 different opopnents

Acceptance criteria:

- Allow 3 rounds of play
- Inform player what number round they are playing

Checklist   Delete

0%
- [ ] Round counter
- [ ] Stop game at 3 rounds

Game dialogue
in list To Do

Labels
5 story points +

Notifications
👁 Watch

Description

Add a more detailed description...

Code checklist   Delete

0%
- [ ] Create introduction dialogue when user launches app
- [ ] Show user stats if requested
- [ ] Show opponent stats if requested
- [ ] Show upgrade shop items

Build Process - Cards

Create heads up display
in list To Do

Labels
| 5 story points | + |

Notifications
👁 Watch

☰ Description   Edit

As a user, I want to be able to see my BeyBlade's stats, how much money I have, what round I'm up to, who my next opponent is.

Acceptance criteria:

- Show user stats, money, round, next opponent
  - Permanently or maybe as a side menu

☑ Code checklist   Delete

0% �юд▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬

- ☐ Create heads up display that shows user BeyBlade stats
- ☐ Create heads up display that shows user current money
- ☐ Create heads up display that shows user the upgrade shop
- ☐ Create heads up display that shows user next opponent(?)

Exception handling
in list To Do

Labels
| 5 story points | + |

Notifications
👁 Watch

☰ Description   Edit

As a user, if I input something that is not a choice, inform me that I have made a mistake

☑ Checklist   Delete

0% ▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬

- ☐ Give user dialogue based on what type of exception has been triggered

User quit/terminate app gracefully
in list To Do

Labels
| 2 story points | + |

Notifications
👁 Watch

☰ Description   Edit

As a user, I want to be able to quit out of the program at any point

Acceptance criteria:

- Whenever user types in keyword ("quit"), game exits with goodbye message

☑ Checklist   Delete

0% ▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬

- ☐ Code that listens for "quit" keyword
- ☐ Goodbye message to user

Build Process - Cards

Add colour formatting
in list To Do

Labels
2 story points +

Notifications
👁 Watch

Description   Edit

As a user, I want to see different coloured text so that I can be able to differentiate between my own user input and the game dialogue

☑ Checklist   Delete

0% ▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬

☐ Find appropriate colour module for import

☐ Format dialogue appropriate for user

Review code adheres to Pep8 code style
in list To Do

Labels
5 story points +

Notifications
👁 Watch

Description   Edit

Ensure that code adheres to Pep8 code style

Testing
in list Done

Labels
5 story points +

Notifications
👁 Watch

Description   Edit

Testing of functions

☑ Checklist   Delete

0% ▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬

☐ Manual testing of 2 main functions

Build Process – Day 1 (October 19)

Build Process – Day 2 (October 20)

To Do

Battle mechanic
☰ ☑ 0/5

End game
☰ ☑ 0/4

3 round loop
☰ ☑ 0/2

Game dialogue
☑ 0/4

Exception handling
☰ ☑ 0/1

User quit/terminate app gracefully
☰ ☑ 0/2

STRETCH GOAL - ASCII art
☑ 0/1

STRETCH GOAL - Random chance encounter
☰

Add colour formatting
☰ ☑ 0/2

+ Add a card

In Progress

Character creation code
☰ ☑ 4/6

Create heads up display
☰ ☑ 3/4

+ Add a card

Done

Upgrade shop mechanic
☰ ☑ 2/2

+ Add a card

Create heads up display
in list In Progress

Labels
5 story points   +

Notifications
👁 Watch

Description   Edit

As a user, I want to be able to see my BeyBlade's stats, how much money I have, what round I'm up to, who my next opponent is.

Acceptance criteria:

- Show user stats, money, round, next opponent
  - Permanently or maybe as a side menu

☑ Code checklist   Hide checked items   Delete

75% ████████████████████░░░░░░

☑ Create heads up display that shows user BeyBlade stats
☑ Create heads up display that shows user current money
☑ Create heads up display that shows user the upgrade shop
☐ Create heads up display that shows user next opponent(?)

```
================================================
Rounds left: 3   |   Total BeyBlade power: 446   |   Money: 200
[1] Check BeyBlade Stats | [2] Go to Upgrade Store | [3] Battle
================================================
```

Upgrade shop mechanic
in list Done

Labels
5 story points   +

Notifications
👁 Watch

Description   Edit

As a player, I want to be able to upgrade the stats of my BeyBlade

Acceptance criteria:

- Present player with list of different upgrades
- Subtract cost of upgrade from player's money
- Upgrade selected stat for BeyBlade

☑ Checklist   Hide checked items   Delete

100% ████████████████████████████████

☑ Display types of upgrades and randomised cost
☑ Allow 1 upgrade per round (subtract from money)

```
2
 ** Welcome to the UPGRADES shop! **
[A] Buy Strength stat upgrade: 26 dollars
[B] Buy Speed stat upgrade: 23 dollars
[C] Buy Stamina stat upgrade: 14 dollars

You can only upgrade once before each battle!
================================================
Rounds left: 3   |   Total BeyBlade power: 370   |   Money: 200
[1] Check BeyBlade Stats | [2] Go to Upgrade Store | [3] Battle
================================================
```

To Do

End game
☰ ☑ 0/4

3 round loop
☰ ☑ 0/2

Exception handling
☰ ☑ 0/1

User quit/terminate app gracefully
☰ ☑ 0/2

STRETCH GOAL - ASCII art
☑ 0/1

STRETCH GOAL - Random chance encounter
☰

Add colour formatting
☰ ☑ 0/2

+ Add a card

In Progress

Character creation code
☰ ☑ 4/6

Game dialogue
☑ 4/5

+ Add a card

Done

Upgrade shop mechanic
☰ ☑ 2/2

Create heads up display
☰ ☑ 4/4

Battle mechanic
☰ ☑ 7/7

+ Add a card

🗔 **Battle mechanic**
in list Done

Labels   **Notifications**
[13 story points] [+]   👁 Watch

☰ **Description**   Edit

As a player I want to be able to use my BeyBlade to battle another player

Acceptance criteria:

- Win or lose outcome
- Add or subtract from player's money on win or lose

☑ **Checklist**   Hide checked items   Delete

100% ▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓

☑ Show current user BeyBlade stats
☑ Show opponent BeyBlade stats
☑ Ask user READY to commence battle
☑ Calculate total power output for each BeyBlade
☑ Show winner
☑ Give out money to player for win, subtract money for loss
☑ Create opponent stat balancer as rounds progress to nudge player to upgrade stats

```
Your opponent is Ron Weasley. Their BeyBlade has a total power of 425.
Do you want to battle? (Yes or No)
```

```
You have to beat Satoru Gojo (Total power: 486) first before battling someone else!
Do you want to battle? (Yes or No)
yes
Max has won the battle!
You won $37 for winning this round!
```

Build Process – Day 4 (October 22)

Build Process – Day 5 (October 23)

To Do
- Exception handling — 0/1
- User quit/terminate app gracefully — 0/2
- STRETCH GOAL - ASCII art — 0/1
- STRETCH GOAL - Random chance encounter
- Add colour formatting — 0/2
- Review code adheres to Pep8 code style

+ Add a card

In Progress
- End game — 1/4

+ Add a card

Done
- Character creation code — 6/6
- Upgrade shop mechanic — 2/2
- Create heads up display — 4/4
- Battle mechanic — 7/7
- 3 round loop — 2/2
- Game dialogue — 5/5

+ Add a card

End game
in list In Progress

Labels
8 story points   +

Notifications
👁 Watch

Description   Edit

As a player, after 3 rounds in the tournament, I want to end playing the game

Acceptance criteria:
- Show player end game dialogue, win or lose
- Present stats to user (output to txt file?)

Checklist   Hide checked items   Delete

25% ▓▓▓▓▓▓▓▓
- ☑ Show user win or lose based on win/lose criteria
- ☐ Show overall game stats (reveal stat modifiers)
- ☐ Output stats to output txt file
- ☐ STRETCH GOAL - Create tournament win certificate txt file

---

```
That's the end of the tournamen!
Unfortunately you didn't win the tournament this time :(
Have a safe flight home, we'll see you next time!
```

```
That's the end of the tournament!
You get the trophy but you don't have enough money to fly home!
I've got an Auntie that runs a fish and chip shop in town if you need to make a bit of money..?
```

Build Process – Day 5 (October 23)

To Do
- User quit/terminate app gracefully — 0/2
- STRETCH GOAL - ASCII art — 0/1
- STRETCH GOAL - Random chance encounter
- Review code adheres to Pep8 code style
- Testing — 0/1
- + Add a card

In Progress
- End game — 1/4
- + Add a card

Done
- Character creation code — 6/6
- Upgrade shop mechanic — 2/2
- Create heads up display — 4/4
- Battle mechanic — 7/7
- 3 round loop — 2/2
- Game dialogue — 5/5
- Exception handling — 1/1
- Add colour formatting — 2/2
- + Add a card

Exception handling
in list Done

Labels
5 story points +

Notifications
Watch

Description Edit
As a user, if I input something that is not a choice, inform me that I have made a mistake

Checklist Hide checked items Delete
100%
☑ Give user dialogue based on what type of exception has been triggered

```
hello
This is not a valid selection
=============================================================
Rounds left: 3    |    Total BeyBlade power: 383    |    Money: 200
[1] Check BeyBlade Stats | [2] Go to Upgrade Store | [3] Battle
=============================================================
```

```
4
This is not a valid selection
=============================================================
Rounds left: 3    |    Total BeyBlade power: 383    |    Money: 200
[1] Check BeyBlade Stats | [2] Go to Upgrade Store | [3] Battle
=============================================================
```

Add colour formatting
in list Done

Labels
2 story points +

Notifications
Watch

Description Edit
As a user, I want to see different coloured text so that I can be able to differentiate between my own user input and the game dialogue

Checklist Hide checked items Delete
100%
☑ Find appropriate colour module for import
☑ Format dialogue appropriate for user

```
** Welcome to the UPGRADES shop! **

[A] Buy STRENGTH stat upgrade: 23 dollars
[B] Buy SPEED stat upgrade: 24 dollars
[C] Buy STAMINA stat upgrade: 26 dollars

=============================================================
Rounds left: 3    |    Total BeyBlade power: 378    |    Money: 200

[1] Check BeyBlade Stats | [2] Go to Upgrades Store | [3] Battle Lobby
[4] Check Player Info                                          [Q] Quit
=============================================================
```

Build Process – Day 5 (October 23)

To Do

STRETCH GOAL - Random chance encounter

Review code adheres to Pep8 code style

Testing
☑ 0/1

Help file
☑ 0/3

+ Add a card

In Progress

End game
☑ 1/4

+ Add a card

Done

Character creation code
☑ 6/6

Upgrade shop mechanic
☑ 2/2

Create heads up display
☑ 4/4

Battle mechanic
☑ 7/7

3 round loop
☑ 2/2

Game dialogue
☑ 5/5

Exception handling
☑ 1/1

Add colour formatting
☑ 2/2

User quit/terminate app gracefully
☑ 2/2

STRETCH GOAL - ASCII art
☑ 1/1

+ Add a card

User quit/terminate app gracefully
in list Done

Labels
2 story points +

Notifications
👁 Watch

≡ **Description**   Edit

As a user, I want to be able to quit out of the program at any point

Acceptance criteria:

- Whenever user types in keyword ("quit"), game exits with goodbye message

☑ **Checklist**   Hide checked items   Delete

100% �▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬

☑ Code that listens for "quit" keyword

☑ Goodbye message to user

```
Thanks for playing, see you next time!
```

STRETCH GOAL - ASCII art
in list Done

Notifications
👁 Watch

≡ **Description**

Add a more detailed description...

☑ **Checklist**   Hide checked items   Delete

100% ▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬

☑ Add ASCII art

2023 BATTLE BEYBLADE BONANZA

Tom and levin
2023 Champions

Build Process – Day 5 (October 23)

To Do

STRETCH GOAL - Random chance encounter

Review code adheres to Pep8 code style

Help file
☑ 0/3

+ Add a card

In Progress

End game
≡ ☑ 1/4

Testing
≡ ☑ 0/1

+ Add a card

Done

Character creation code
≡ ☑ 6/6

Upgrade shop mechanic
≡ ☑ 2/2

Create heads up display
≡ ☑ 4/4

Battle mechanic
≡ ☑ 7/7

3 round loop
≡ ☑ 2/2

Game dialogue
☑ 5/5

Exception handling
≡ ☑ 1/1

Add colour formatting
≡ ☑ 2/2

User quit/terminate app gracefully
≡ ☑ 2/2

STRETCH GOAL - ASCII art
☑ 1/1

+ Add a card

🖥 **Testing**
in list In Progress

Labels
5 story points +

Notifications
👁 Watch

≡ **Description**   Edit

Testing of functions

☑ **Checklist**   Delete

0%
☐ Manual testing of 2 main functions

Build Process – Day 5 (October 23)

Build Process – Day 6 (October 24)