

The Purpose and End User of my website

My website is going to be about the mobile game Clash Royale. The purpose of my website is to give out all the stats (attack speed, range, splash or not.) on all the cards in clash royale and also how to counter those cards. In my website people can also give out battle decks that worked out for them. People can also make changes to other people's battle decks. The website is aimed for the people who play Clash Royale

Github link → <https://github.com/devanbrohere/year-13-project>

Iteration 0 (PLAN)

Website layout and design including fonts & colors

Nav pages



This is the home page with a description of what Clash Royale is and how to play the game.

This is the contact page plan

This is the about us page



This is the plan for the card page

The plan for the rarity page

routes

Homepage = “home.html”

About = “about.html”

Contact = “contact.html”

Plan (Version 2)

```
@app.route('/')
def homepage():

@app.route('/about')
def about():

@app.route('/contact')
def contact():

@app.route('/card')
def card():

@app.route('/rarity')
def rarity():
```

```

@app.route('/attack_type')

def attack_type():

    @app.route('/evolution')

    def evolution():

        @app.route('/min_trophies')

        def min_trophies():

```

Sql queries

SELECT * FROM card	Shows all the cards in the game
<pre> cur.execute("SELECT * FROM card WHERE id = ? ", (id,)) cur.execute("SELECT type FROM Rarity WHERE id = ?", (card[2],)) cur.execute("SELECT type FROM attack_type WHERE id = ?", (card[3],)) cur.execute("SELECT trophies,arena FROM min_trophies_unlocked WHERE id = ?", (card[4],)) cur.execute("SELECT evolution FROM Evolution WHERE id = ?", (card[5],)) </pre>	Shows all the stats of the card
<pre> cur.execute('SELECT * FROM Rarity'). cur.execute("""SELECT id, name, image FROM card WHERE rarity= ?""", (id,)) </pre>	This shows all the rarity types and then shows all the cards in that rarity

```

cur.execute('SELECT * FROM
attack_type') . cur.execute("""SELECT
id, name, image FROM card WHERE
attack_type = ?""", (id, ))

```

To show all the cards with the same attack type

Nielsen's Heuristics

Pre(in plan)

visibility and System status	<p>Visibility of System Status is one of the most fundamental principles in usability design. It refers to how well a system communicates with users about what is happening at any given moment, ensuring they are always informed about the current state of the system. This helps reduce confusion, increase user confidence, and improve overall user experience.</p> <p>I will implement this into my website by having flash messages when you login, signup and add a card, whether the card is already in the database or not. It basically gives a flash message whenever it is rerouted.</p>
Match Between the System and the Real World	<p>The design should speak the users' language. Use words, phrases, and concepts familiar to the user, rather than internal jargon. Follow real-world conventions, making information appear in a natural and logical order.</p> <p>I will implement this into my website by having information of the cards presented in a table so that it looks presented in a neat manner, making everything be presented in the center.</p>

During

Recognition Rather than Recall	<p>Minimize the user's memory load by making elements, actions, and options visible. The user should not have to remember information from one part of the interface to another. Information required to use the design (e.g. field labels or menu items) should be visible or easily retrievable when needed.</p> <p>I used to have a nav bar which does not follow Recognition rather than recall because in the first place users did not know where the nav was and second of all they did not know what the icons in the navbar meant so i changed my nav to be on the top of the page and have the names of where they lead to instead of having them as icons</p>
User Control and Freedom	<p>Users often perform actions by mistake. They need a clearly marked "emergency exit" to leave the unwanted action without having to go through an extended process.</p> <p>For my website I have added a back to all cards after you click on a card to look at its stats. I used to have it at the end of the page but realized that the user would have to scroll down to the bottom to access it which limits their freedom, instead i moved it to the bottom left corner of the page and fixed its position there so that it is always visible at any point in time. They are also able to use the nav bar at a given time and webpage.</p>

Relevant Implications

html

Aesthetics	For my website, I plan to create a visually engaging and fun experience with an animated, dark background filled with moving stars. This will evoke a dynamic, immersive space theme. The font will be Comic Sans, offering a lighthearted, playful feel. The background's movement will keep the design interesting, while the text will be in Emerald green , providing vibrant contrast against the dark backdrop.
Functionality	For my website, I ensured that functionality remains a key focus by implementing flexbox and CSS grid in the styling. This allows the website's layout to adjust dynamically to different screen sizes, ensuring that whether users visit the site on a large desktop monitor or a small mobile device, they will still experience smooth and intuitive navigation. The responsive design ensures that all content, images, and elements on the website adapt seamlessly, offering a consistent and user-friendly experience across devices.

Database

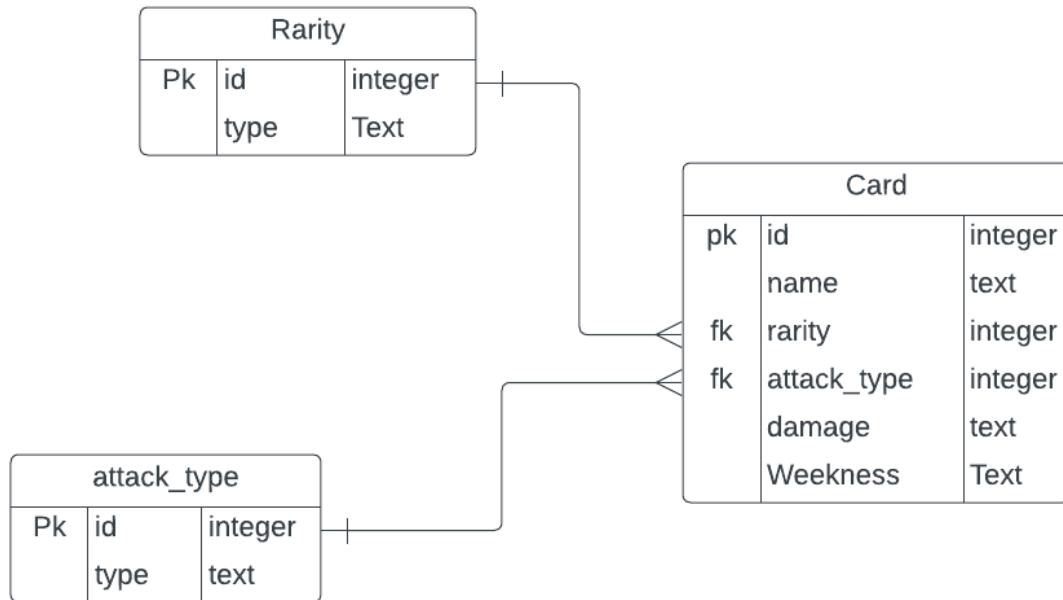
Security and Privacy	For my project, I have implemented hashing to protect passwords and encryption to secure sensitive data. These measures work together to create a login system that effectively defends against potential threats
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	and upholds user privacy.
Sustainability	I have implemented this into my website by asking only for the id as no matter what changes you make to them you can only have integers in them and since you are pulling only integers and selecting everything that is in the row of an integer, the website will still run properly without any problems

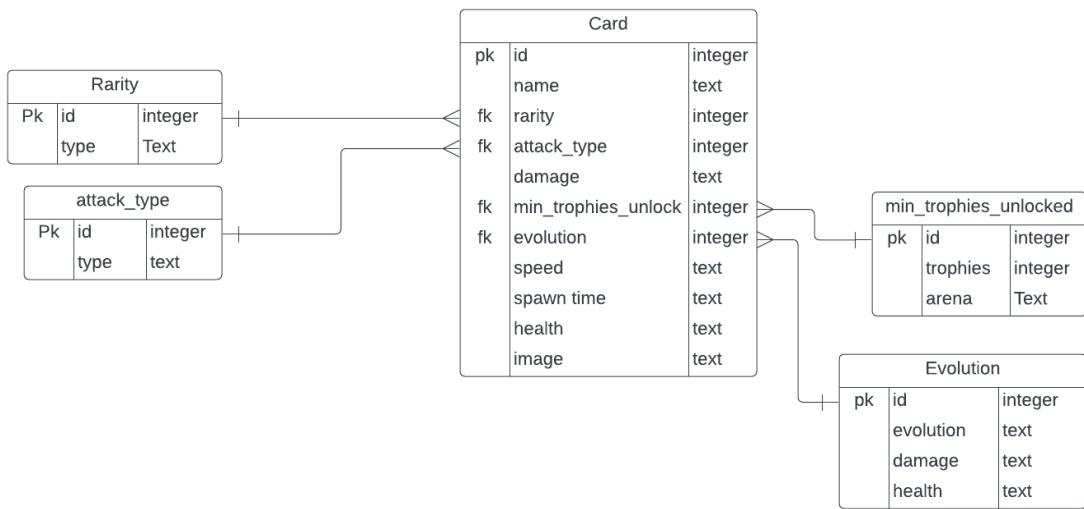
DATABASE iteration 1

(pre) VERSION 1

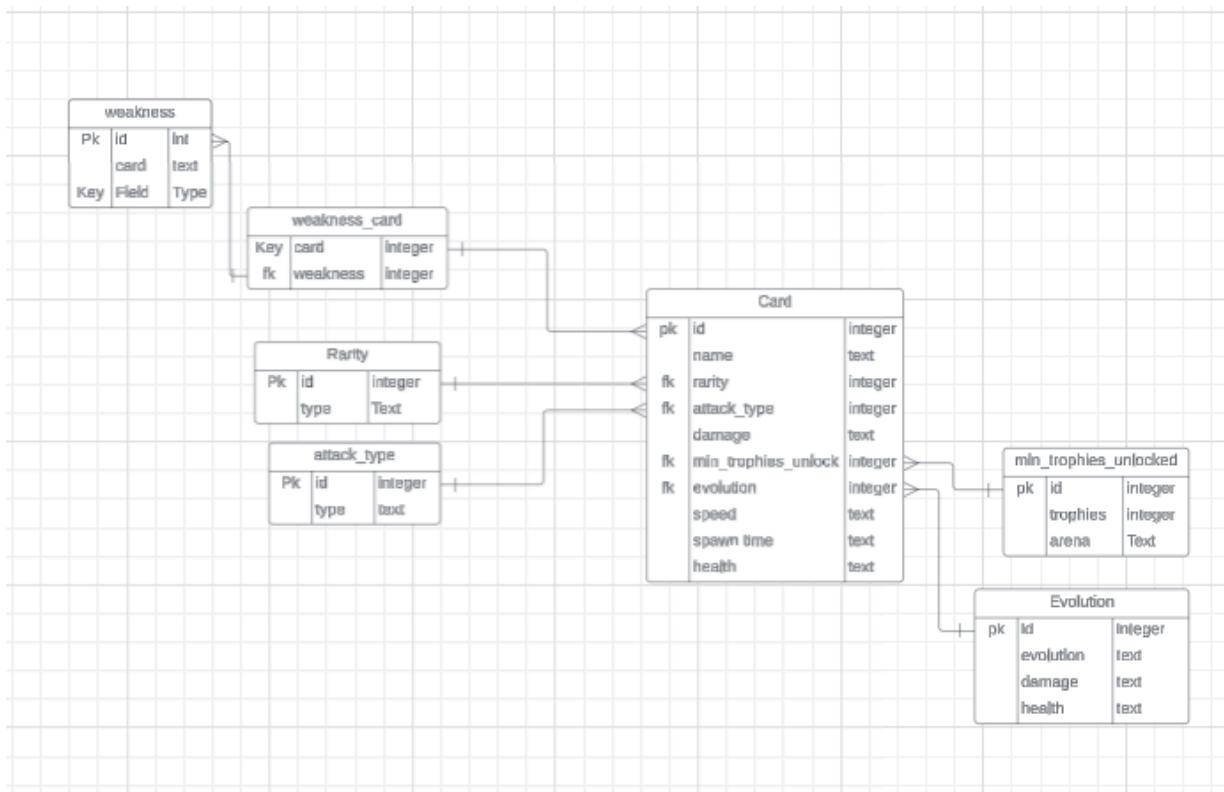
The initial database will include all the cards and then show the stats of each card once a card is clicked its rarity, attack type and damage done will be shown.



(pre) VERSION 3

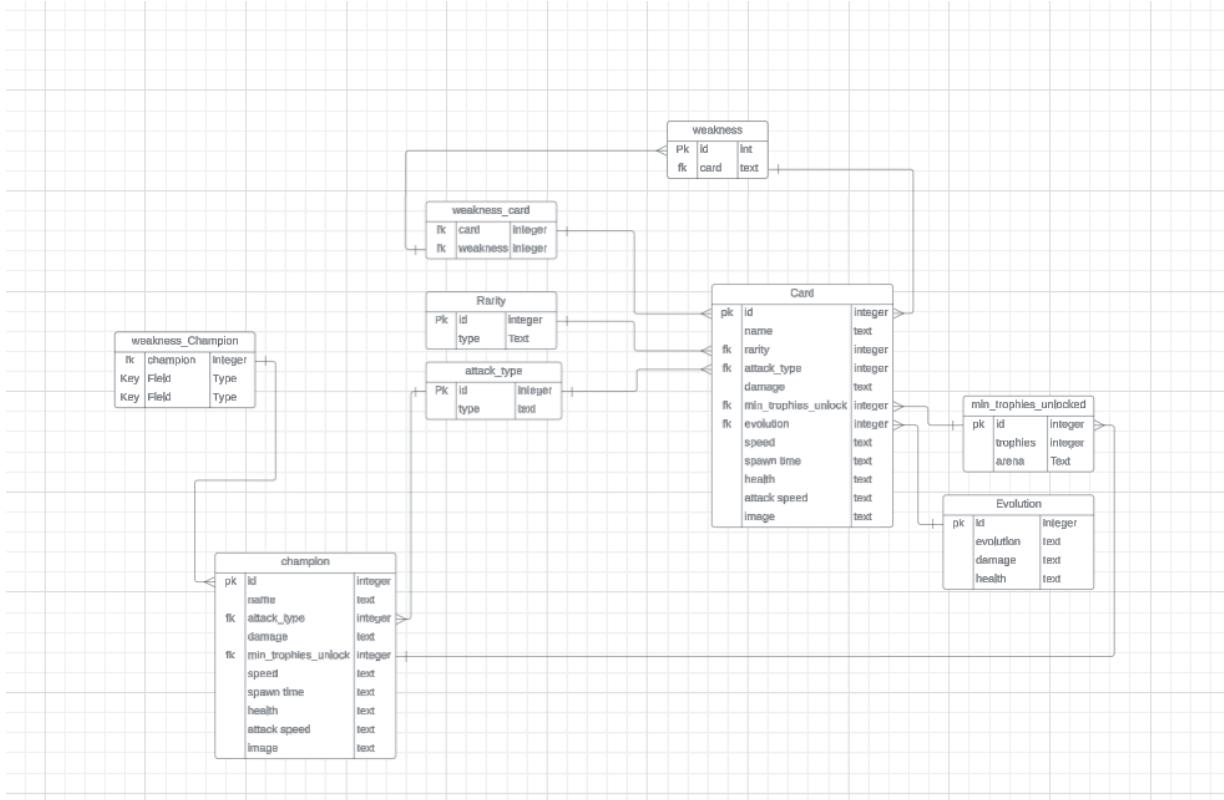


Here I have added evolution to the cards and the damage the evolution cards do(these are the stats for every card)
 (dur) Version 4



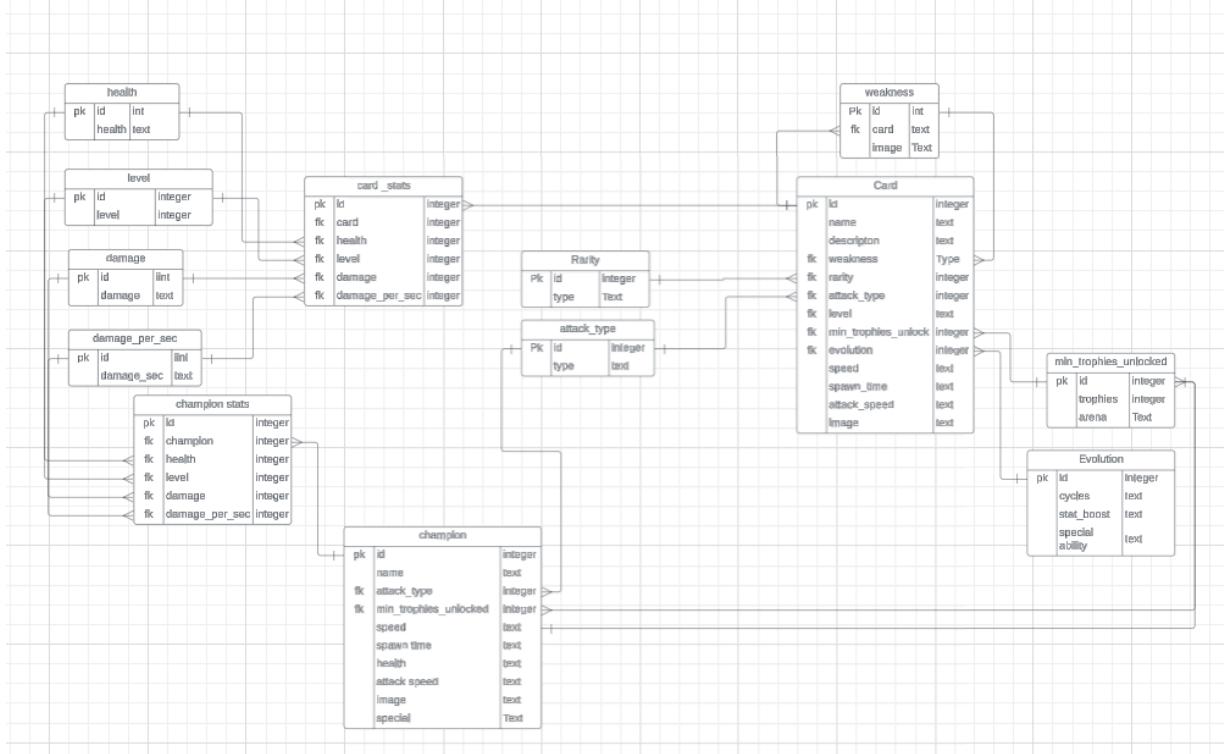
Here i have added the weakness for every card (what cards work best against what cards)

(dur) Version 5



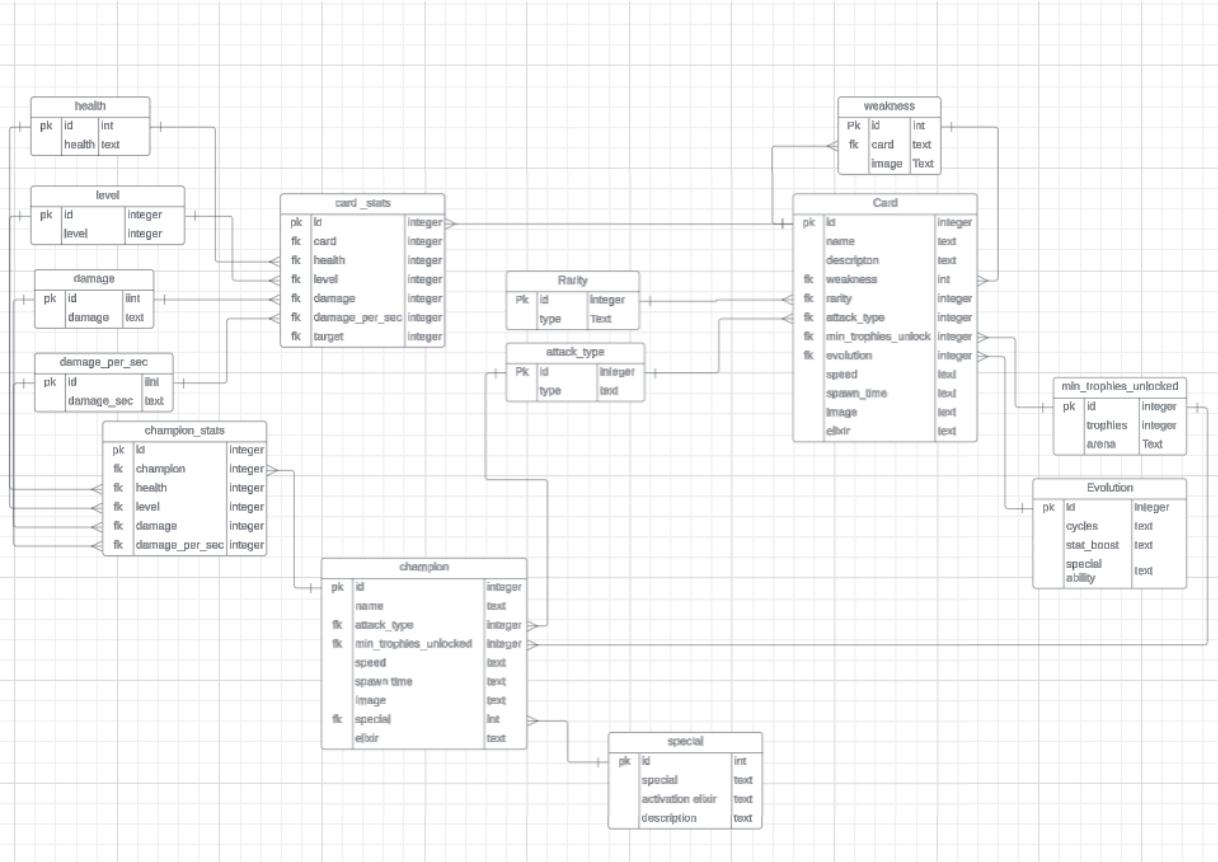
Here I have added a champion table as it is a different class and I made the weakness a many to many linked to the same table. I have done this so that i don't have to give names of the cards that have already been entered into the database.

(dur)Version 7



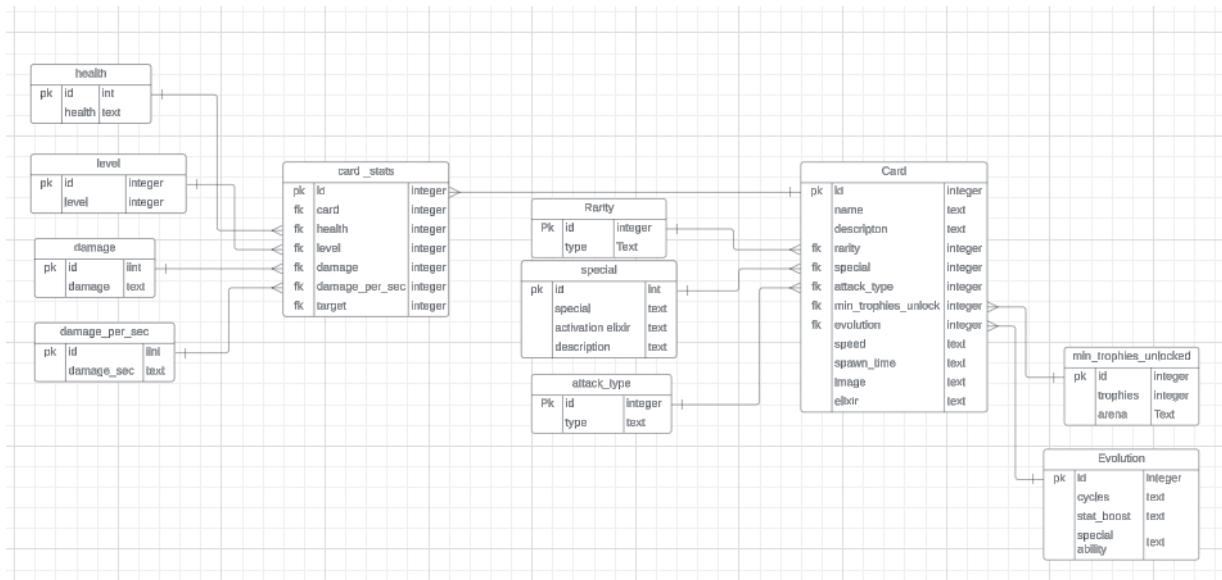
Here I have added stats table which connects health damage and damage/sec for every level and joined it to the cards and the champions table

(dur)Version 8



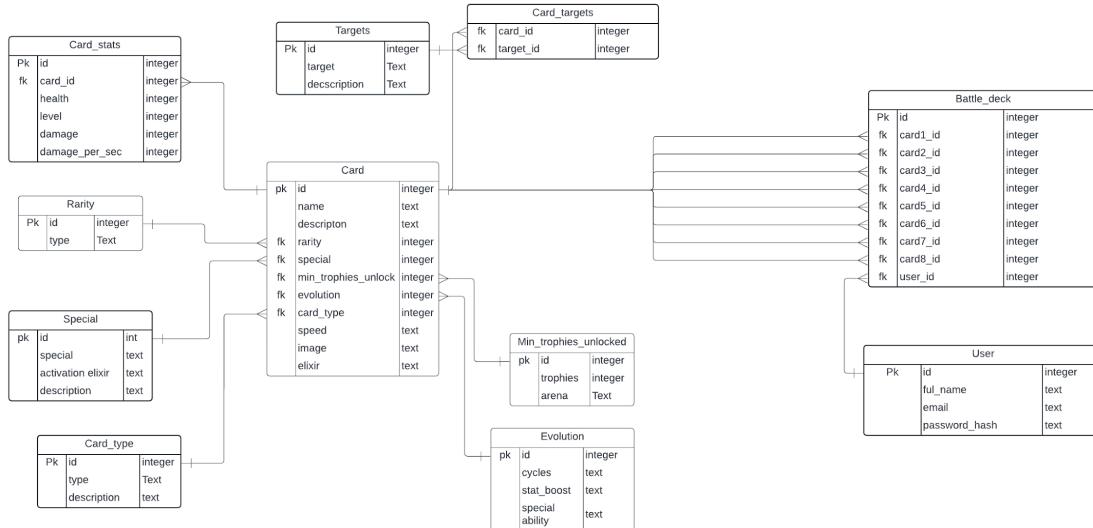
Here I have added the special for the champion. It is another table because it has got stats for the special

(dur)Version 9



In this version I removed the champion table because it served the same purpose as the card table. The champion query was clashing with the card query and so I deleted the champion table so that it does not clash together and I also will not have to repeat a function that serves the same purpose.

(Final)Version 10

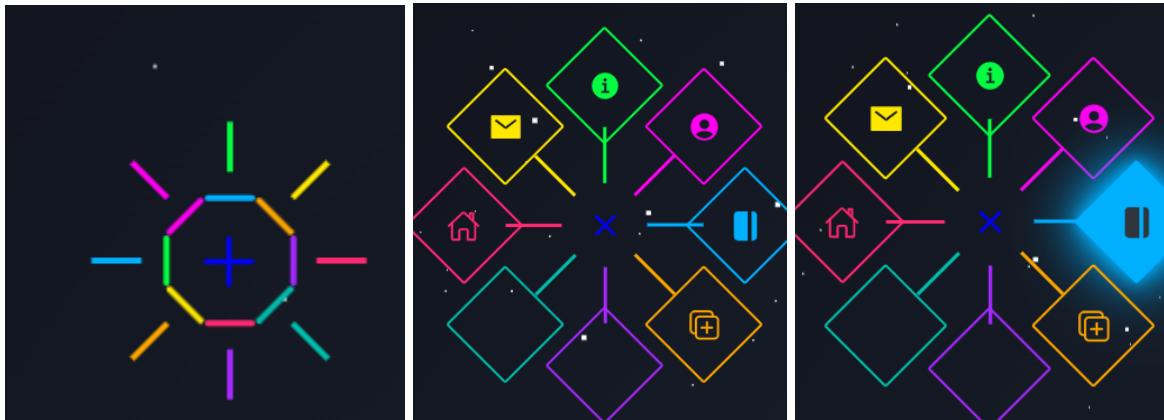


In this version I have mage card stats as one table instead of making it a many to many relationship because it is easier to do it this way and the previous way was not necessary. I also have added a battle deck table where there are 8 cards in it, those 8 cards are taken from

the card table. Every battle deck is created by one user so a different user looks at the battle decks they are able to filter and see battle decks made by certain users. I made the targets and cards a many to many relationship because one card can have multiple targets

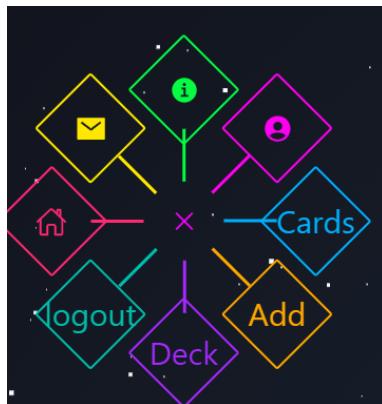
Iteration 2 (adding nav bar)

I had planned on making different types of navigation systems and settled on a nav system that once you click it, it rotates and expands into a larger circle with different color boxes that show 8 icons that lead to different webpages. When you hover over the icons the box that it is in lights up into a highlighted color of the respective boxes. When the boxes highlight the icons change color to black and will also become bold.



User feedback

commenter	comment	change
Grandparents	Make the nav come out quicker and have something to indicate that there is a nav bar there	



	When you hover over the text links you are not able to see what the text is as it will also be highlighted. Maybe make it simple
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WHAT IS CLASH ROYALE

Clash Royale is an online multiplayer card game by Supercell, featuring characters from the empire building game, Clash of Clans . Clash Royale players can collect and upgrade cards through in-app purchases, win trophies and crowns, and create or join battle communities to share cards and win territories

parents	Only show the admin on the nav page if it is admin that is logged in and also if the user is not logged in then don't show logout only show login and vice versa
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WHAT IS CLASH ROYALE

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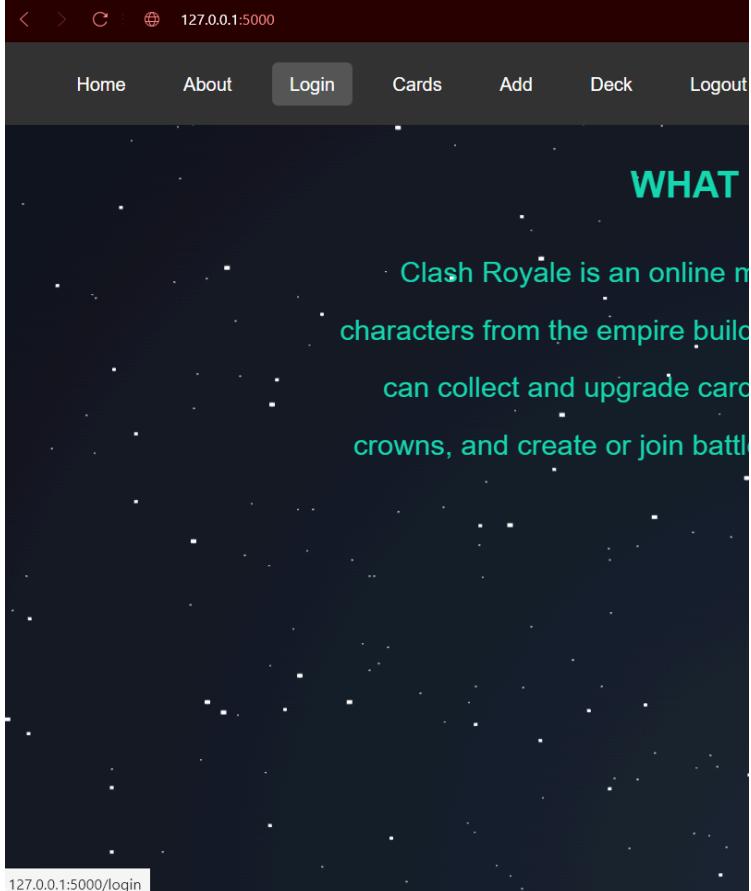
Welcome Back, god!

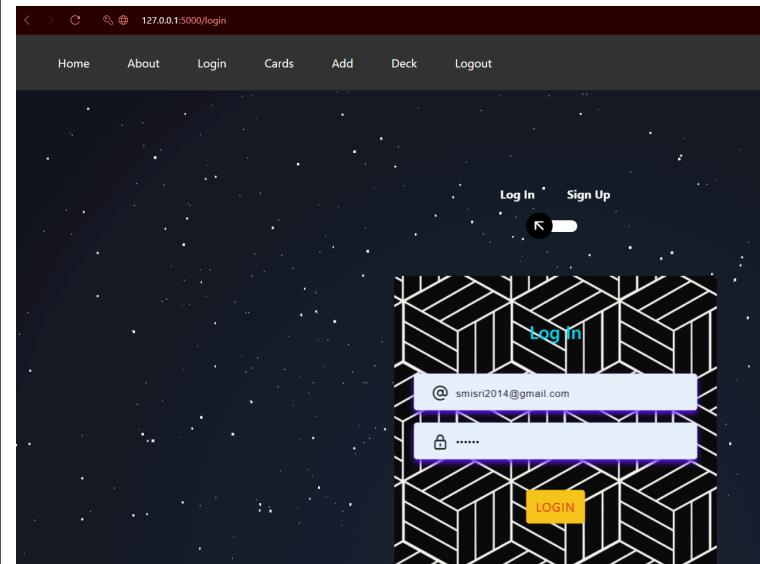
WHAT IS CLASH ROYALE

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		<p>Home About Logout Cards Decks Admin</p> <p>WHAT IS CLASH ROYALE</p> <p>Clash Royale is an online multiplayer card game by Supercell, featuring characters from the empire building game, Clash of Clans . Clash Royale players can collect and upgrade cards through in-app purchases, win trophies and crowns, and create or join battle communities to share cards and win territories</p>	Welcome Back, Smithal
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Testing

How does it work	Expected outcome	outcome	pass/fail
Takes you to the select page from the nav bar	Takes you to the webpage you want to go to and takes you to the page that is specified on the nav bar	As expected	<p>Pass</p> 



works the same for all the other nav pages

Iteration 3 (background)

The initial background in my plan had too much going in the background and the words were really hard to read. The background that I changed it into was a galaxy themed animated background where there are white dots which represent stars that move and a cyan colored text. This color combo makes the text easier to read as there is not a lot going on in the background.

WHAT IS CLASH ROYALE

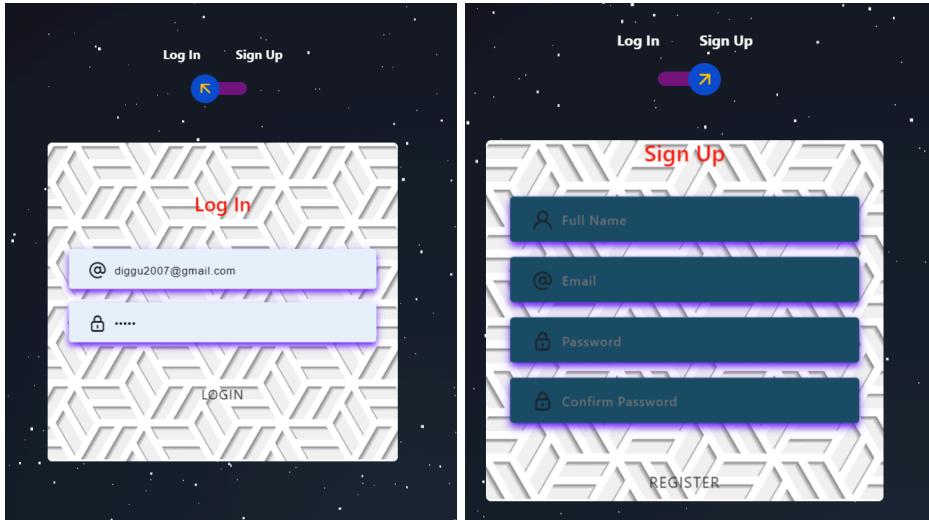


Clash Royale is an online multiplayer card game by Supercell, featuring characters from the empire building game, Clash of Clans. Clash Royale players can collect and upgrade cards through in-app purchases, win trophies and crowns, and create or join battle communities to share cards and win territories

Iteration 4 `(login/signup)

I have made a one html page that has a card in it. This card flips so we have one side with login and the other side with sign up. The login and the sign up routes are different but return

to the same template. I thought of having these in separate html pages that link to each other but realized that it was not that efficient. So I came up with this flip card. I have also added a slider to show what form you are in. If the user is not in the database and they try to login beforehand it will flash a message "no user found please signup". If you try to register an account that has already been registered(signed up) then a flash message will pop up saying "already registered please login. Once logged in a flash with the user's name will show and be redirected to the



Test

How does it work	Expected outcome	outcome	pass/fail
The sign up form will check if the user has already signed up. If user is already signed up then it will return a flash asking the user to login in	It should flash a message saying email already registered please login. And redirects to the login html	As expected	pass
The login form will check if the email imputed is one that is already in the database if not asks the user to sign up.	A message should flash saying "email not found, please sign up" if the email used to login is not already registered in the database. When switched to the	As expected	pass

	signup page the email that was not registered will be on the email field automatically		
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Iteration 5 (implementing sqlalchemy)

I implemented this into the code for the query. SQLAlchemy simplifies complex SQL operations, such as joins, subqueries, and transactions, by allowing developers to use Pythonic expressions and methods. This can significantly reduce the amount of code and logic required to perform database operations, thus making it better than normal queries

```
# Association table for many-to-many relationship between Cards and Targets
Card_Targets = db.Table('card_targets',
    db.Column('card_id', db.Integer, db.ForeignKey('Card.id'), primary_key=True),
    db.Column('target_id', db.Integer, db.ForeignKey('Target.id'), primary_key=True))

# Cards model representing the card entity in the database
class Cards(db.Model):
    __tablename__ = 'Card'
    id = db.Column(db.Integer, primary_key=True)
    name = db.Column(db.Text()) # Name of the card
    description = db.Column(db.Text()) # Description of the card
    rarity = db.Column(db.Integer, db.ForeignKey("Rarity.id")) # Foreign key to Rarity
    rarity_type = db.relationship("Rarity", backref="Card") # Relationship to Rarity model
    Min_trophies_unlocked = db.Column(db.Integer, db.ForeignKey("Min_trophies_unlocked.id")) # Foreign key to Min_trophies_unlocked
    Trophies = db.relationship("Trophies", backref="Trophies") # Relationship to Trophies model
    evolution = db.Column(db.Integer, db.ForeignKey("Evolution.id")) # Foreign key to Evolution
    evo = db.relationship("Evolution", backref="Evolution") # Relationship to Evolution model
    Special = db.Column(db.Integer, db.ForeignKey("Special.id")) # Foreign key to Special
    special = db.relationship("Special", backref="Special") # Relationship to Special model
```

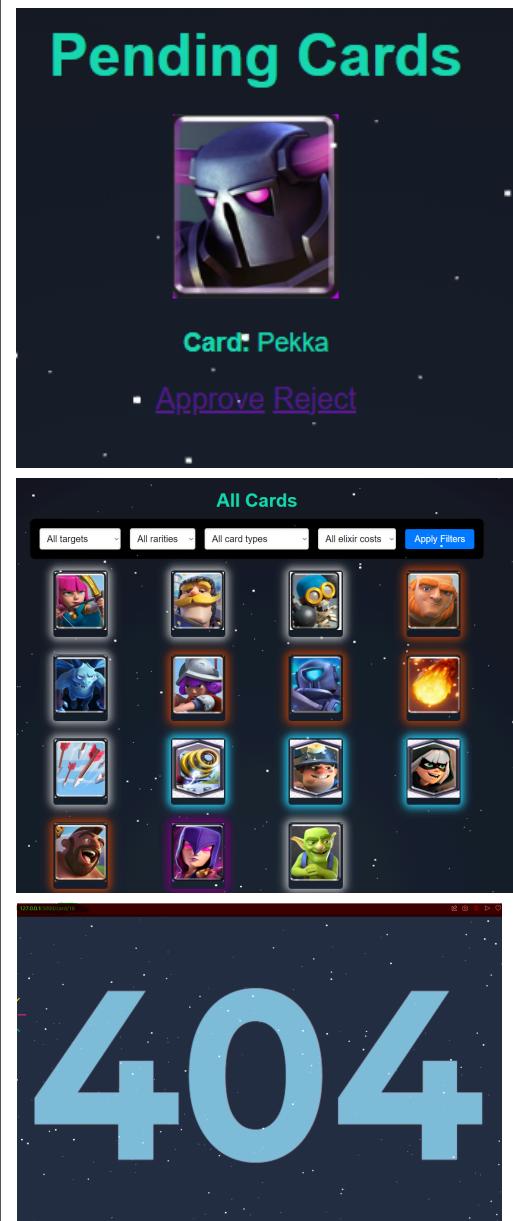
With this the many to many is done in less lines needed compared to the normal query

Iteration 6 (adding(card,evolution...))

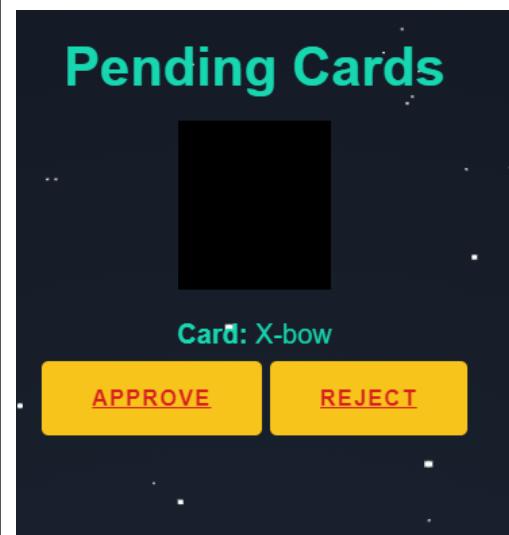
There is a page for adding cards that are not in the database. This page is only accessible if the user is logged in. Once the user has submitted the add card, it will send a confirmation to the admin where they either accept or reject the new commit. This feature is implemented so that users do not add random cards that are not in the game. Once the card has been added you will not be able to see the card as it has to be approved by the admin, even if the user goes to a card and enters the id of the new added card it will not show the card. If it was the admin that added the card then they will be redirected to the admin page to accept the card that was added into the database, if the user that added the card was not the admin then they will be redirected to the home page where a flash pops up saying “added card is pending to be accepted” and also “admin access only” .

Test

How does it work	Expected outcome	outcome	pass/fail																																		
Takes the user input of the new user it stores it in the database	If the user logged in is the admin they will be redirected to the admin page. If the user is not the admin they will return to the home page with a flash saying card pending and admin access only	As expected	pass																																		
If the url is changed then it will redirect to 404 page	If the user clicks on and clicks on a card then change the url for the card that was just added the page will go to a 404 as that card is not active yet	As expected	<p>Pass</p> <table border="1"> <thead> <tr> <th>id</th><th>name</th></tr> </thead> <tbody> <tr><td>1</td><td>Archers</td></tr> <tr><td>2</td><td>Knight</td></tr> <tr><td>3</td><td>Bomber</td></tr> <tr><td>4</td><td>Giant</td></tr> <tr><td>5</td><td>Minions</td></tr> <tr><td>6</td><td>Musketeer</td></tr> <tr><td>7</td><td>Mini P.E.K.K.A</td></tr> <tr><td>8</td><td>Fireball</td></tr> <tr><td>9</td><td>Arrows</td></tr> <tr><td>10</td><td>Sparky</td></tr> <tr><td>11</td><td>Miner</td></tr> <tr><td>12</td><td>Bandit</td></tr> <tr><td>13</td><td>Hog rider</td></tr> <tr><td>14</td><td>Witch</td></tr> <tr><td>15</td><td>Goblins</td></tr> <tr><td>16</td><td>Pekka</td></tr> </tbody> </table>	id	name	1	Archers	2	Knight	3	Bomber	4	Giant	5	Minions	6	Musketeer	7	Mini P.E.K.K.A	8	Fireball	9	Arrows	10	Sparky	11	Miner	12	Bandit	13	Hog rider	14	Witch	15	Goblins	16	Pekka
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15	Goblins																																				
16	Pekka																																				



Making the first letter of the name capitalized	It makes the first letter of the card name capital even when the entered name is lowercase so that the unique constraint works with even if the first imputed letter is capital or not	As expected The same works for the other add pages as we do not want the same names entered into the database	Pass
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Checking if the form reloads every time it changes	When something is added into a different form and then you move to another form the page reloads. I am adding this feature because the add card and stats form does not show after something else is added in a different form, so it always needs a reload to get the forms back.	As expected	Pass

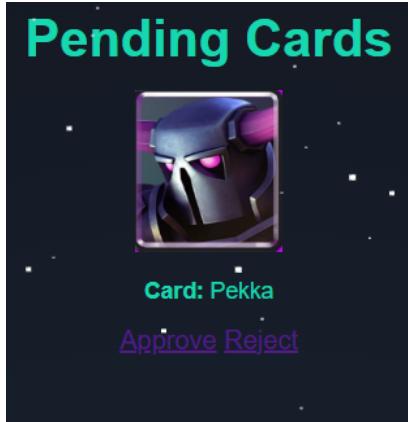
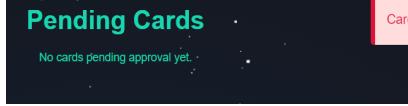
User feedback by friend

In the add target select multiple fields where we can select more than 1 target, instead of having to ctrl click on the targets make it as checkboxes so that it is more user friendly. I have taken this into account as it is a good idea but will not be implementing it into the website at this stage as the deadline is approaching for the project. I will implement this later on when i am working on this website to make it better during my freetime.

Iteration 7 (admin accept/reject)

I have added this so that users do not add any card. This makes sure that the cards in the database are those that are in the actual game.

Test

How does it work	Expected outcome	outcome	pass/fail
Once a new card is entered then it will be shown to the admin page where the admin will check if the card is a valid card or not. If the admin accepts the card then it will be shown in the website if it is rejected then it will be removed from the database as well as the evolution that the card has as it is a 1-1 relation.	If accepted then it will show the card in all cards, if not then it will delete the card and the evolution that it is connected to from the database.	As expected	<p>Pass</p>  <p>Pending Cards</p> <p>Card: Pekka</p> <p>Approve Reject</p>  <p>Pending Cards</p> <p>No cards pending approval yet.</p> <p>Card and its Evolution (if any) have been approved.</p>

id	name	rarity
1	Archers	
2	Knight	
3	Bomber	
4	Giant	
5	Minions	
6	Musketeer	
7	Mini P.E.K.K.A	
8	Fireball	
9	Arrows	
10	Sparky	
11	Miner	
12	Bandit	
13	Hog rider	
14	Witch	
15	Goblins	
16	Pekka	
17	Test card	

Pending Cards

No cards pending approval yet.

Card and its Evolution (if any) have been deleted.

id	name	rarity
1	Archers	Common
2	Knight	Common
3	Bomber	Common
4	Giant	Common
5	Minions	Common
6	Musketeer	Common
7	Mini P.E.K.K.A	Common
8	Fireball	Common
9	Arrows	Common
10	Sparky	Uncommon
11	Miner	Uncommon
12	Bandit	Uncommon
13	Hog rider	Uncommon
14	Witch	Uncommon
15	Goblins	Uncommon
16	Pekka	Uncommon

Iteration 8 (adding glow to different rarities and card name pop up when hovered, filters)

I have given a glow for different rarities so it is easy to tell what rarity is for the people who already know the game. Even if they did not know the game, if they hover over a card they will be able to see what the name of the card is. I have also added filters so that the user can reduce the number of cards they have to look through.

test

How does it work	Expected outcome	outcome	pass/fail
Cards with different rarity will have different glow colors.	For cards with common rarity the card will be shown with a silver glow	As expected	Pass

	<p>Cards with rare rarity will be shown with a rust color glow</p> <p>Cards with epic rarity will be shown in a purple glow</p> <p>Cards with legendary rarity will glow with an rgb effect</p>																				
Select certain card types and will show the cards in that category This is for Targets	Select form that shows the cards from the selected category by checking what matches with which card	As expected	<table border="1"> <thead> <tr> <th id<="" th=""><th>target</th><th>description</th></th></tr> </thead> <tbody> <tr> <td>1</td><td>Building only</td><td>Targets buildings only</td></tr> <tr> <td>2</td><td>Ground</td><td>Attack ground troop...</td></tr> <tr> <td>3</td><td>Air and ground</td><td>Attacks air and ...</td></tr> <tr> <td>4</td><td>Splash</td><td>Does surrounding ...</td></tr> <tr> <td>5</td><td>Single</td><td>Only does damage t...</td></tr> </tbody> </table>	<th>target</th> <th>description</th>	target	description	1	Building only	Targets buildings only	2	Ground	Attack ground troop...	3	Air and ground	Attacks air and ...	4	Splash	Does surrounding ...	5	Single	Only does damage t...
<th>target</th> <th>description</th>	target	description																			
1	Building only	Targets buildings only																			
2	Ground	Attack ground troop...																			
3	Air and ground	Attacks air and ...																			
4	Splash	Does surrounding ...																			
5	Single	Only does damage t...																			

card_id	target_id
2	2
2	5
6	3
7	2
10	2
10	4
11	2
12	2
13	1
14	3
14	4
15	2
4	1
16	2
16	5

id	name	rarity	min_trop	evolution	speed
1	Archers	4	1	1	Medium
2	Knight	4	1	NULL	Medium
3	Bomber	4	17	2	Medium
4	Giant	3	1	NULL	Slow
5	Minions	4	1	NULL	Fast
6	Musketeer	3	1	NULL	Medium
7	Mini P.E.K.K.A	3	1	NULL	Fast
8	Fireball	3	1	NULL	NULL
9	Arrows	4	1	NULL	NULL
10	Sparky	1	9	1	Slow
11	Miner	1	9	1	slow
12	Bandit	1	6	1	Very fast
13	Hog rider	3	16	1	Very fast
14	Witch	2	14	NULL	Medium
15	Goblins	4	19	NULL	Fast
16	Pekka	2	14	NULL	Very Slow

This test is the same as the one above but for rarities

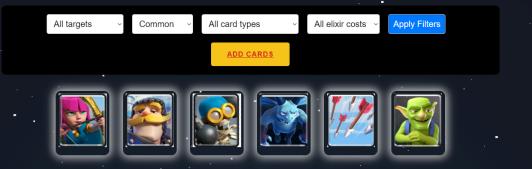
Same as above

Same as above

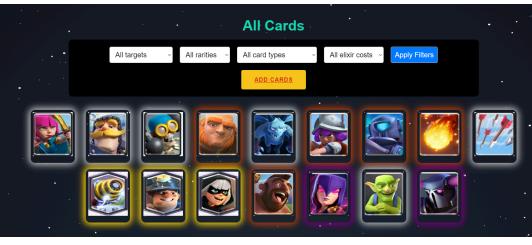
id	type
1	Legendary
2	Epic
3	Rare
4	Common
5	Champion

id	name	rarity
1	Archers	4
2	Knight	4
3	Bomber	4
4	Giant	3
5	Minions	4
6	Musketeer	3
7	Mini P.E.K.K.A	3
8	Fireball	3
9	Arrows	4
10	Sparky	1
11	Miner	1
12	Bandit	1
13	Hog rider	3
14	Witch	2
15	Goblins	4
16	Pekka	2

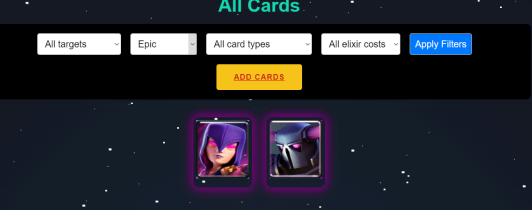
All Cards

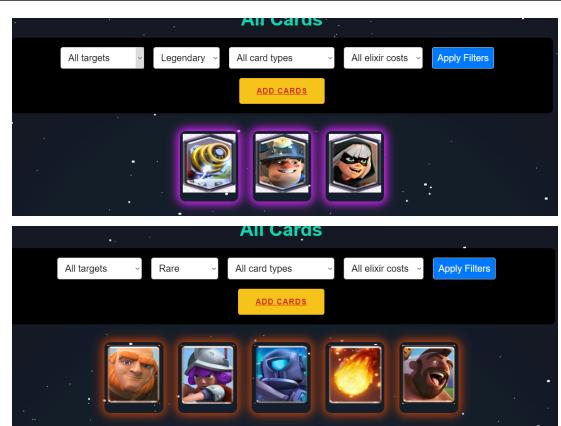


All Cards



All Cards



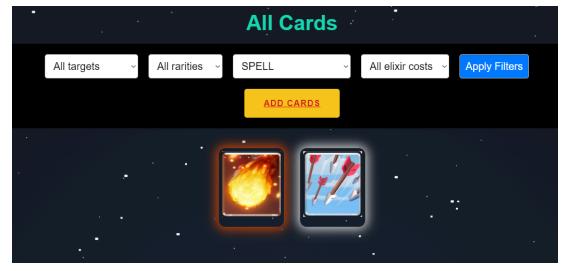


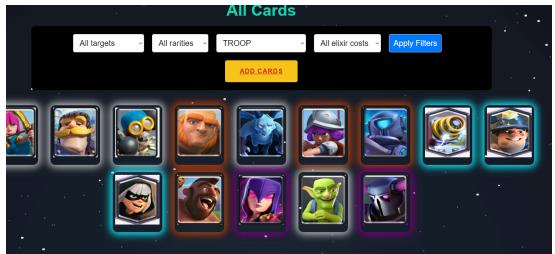
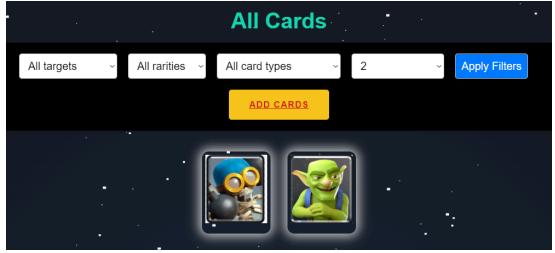
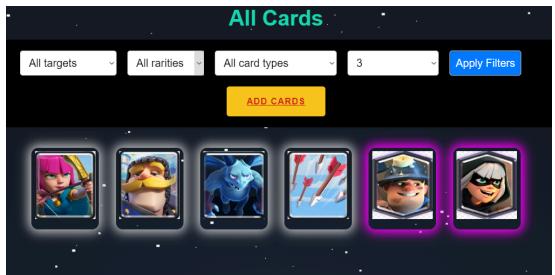
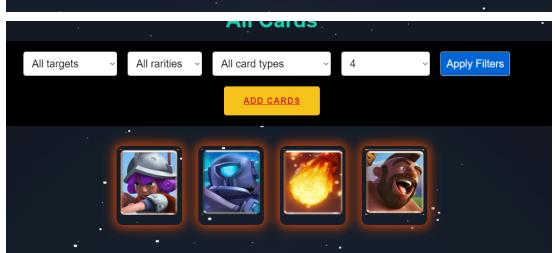
Same as above but for card types

Same as above

As expected

id	type
1	TROOP
2	BUILDING
3	SPELL
4	TOWER TROOPER
id	name
1	Archers
2	Knight
3	Bomber
4	Giant
5	Minions
6	Musketeer
7	Mini P.E.K.K.A
8	Fireball
9	Arrows
10	Sparky
11	Miner
12	Bandit
13	Hog rider
14	Witch
15	Goblins
16	Pekka



																																																																																																																			
Same as above but for elixir	Same as above	As expected	<p>id name rarity min_trop evolution card_type elixir</p> <table border="1"> <tbody> <tr><td>1</td><td>Archers</td><td>4</td><td>1</td><td>1</td><td>1</td><td>3</td></tr> <tr><td>2</td><td>Knight</td><td>4</td><td>1</td><td>NULL</td><td>1</td><td>3</td></tr> <tr><td>3</td><td>Bomber</td><td>4</td><td>17</td><td>2</td><td>1</td><td>2</td></tr> <tr><td>4</td><td>Giant</td><td>3</td><td>1</td><td>NULL</td><td>1</td><td>5</td></tr> <tr><td>5</td><td>Minions</td><td>4</td><td>1</td><td>NULL</td><td>1</td><td>3</td></tr> <tr><td>6</td><td>Musketeer</td><td>3</td><td>1</td><td>NULL</td><td>1</td><td>4</td></tr> <tr><td>7</td><td>Mini P.E.K.K.A</td><td>3</td><td>1</td><td>NULL</td><td>1</td><td>4</td></tr> <tr><td>8</td><td>Fireball</td><td>3</td><td>1</td><td>NULL</td><td>3</td><td>4</td></tr> <tr><td>9</td><td>Arrows</td><td>4</td><td>1</td><td>NULL</td><td>3</td><td>3</td></tr> <tr><td>10</td><td>Sparky</td><td>1</td><td>9</td><td>1</td><td>1</td><td>6</td></tr> <tr><td>11</td><td>Miner</td><td>1</td><td>9</td><td>1</td><td>1</td><td>3</td></tr> <tr><td>12</td><td>Bandit</td><td>1</td><td>6</td><td>1</td><td>1</td><td>3</td></tr> <tr><td>13</td><td>Hog rider</td><td>3</td><td>16</td><td>1</td><td>1</td><td>4</td></tr> <tr><td>14</td><td>Witch</td><td>2</td><td>14</td><td>NULL</td><td>1</td><td>5</td></tr> <tr><td>15</td><td>Goblins</td><td>4</td><td>19</td><td>NULL</td><td>1</td><td>2</td></tr> <tr><td>16</td><td>Pekka</td><td>2</td><td>14</td><td>NULL</td><td>1</td><td>7</td></tr> </tbody> </table>   	1	Archers	4	1	1	1	3	2	Knight	4	1	NULL	1	3	3	Bomber	4	17	2	1	2	4	Giant	3	1	NULL	1	5	5	Minions	4	1	NULL	1	3	6	Musketeer	3	1	NULL	1	4	7	Mini P.E.K.K.A	3	1	NULL	1	4	8	Fireball	3	1	NULL	3	4	9	Arrows	4	1	NULL	3	3	10	Sparky	1	9	1	1	6	11	Miner	1	9	1	1	3	12	Bandit	1	6	1	1	3	13	Hog rider	3	16	1	1	4	14	Witch	2	14	NULL	1	5	15	Goblins	4	19	NULL	1	2	16	Pekka	2	14	NULL	1	7
1	Archers	4	1	1	1	3																																																																																																													
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16	Pekka	2	14	NULL	1	7																																																																																																													

Hovering on the card shows its name	When you hover over a card the card drops down to animate a selected item and also the name of the card fades in so that users know what the name of the card is	As expected	<p>Pass</p>

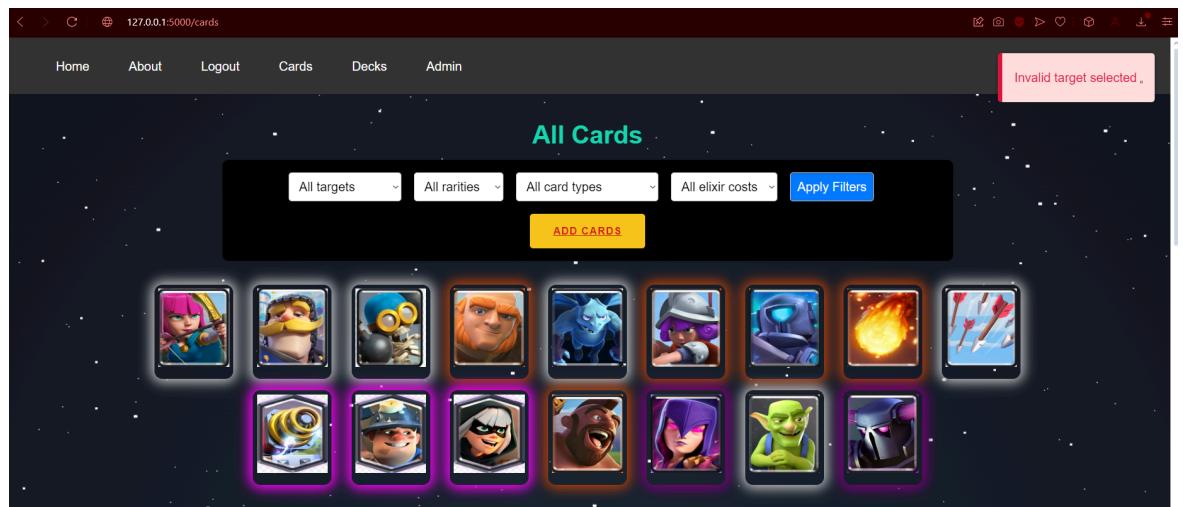
User feedback

User	comments	changes
classmate	Instead of showing the cards in tables show them as flex box since it is better	I gave it a try and it was a lot better when i changed the sizing of the screen so i decided to keep it there

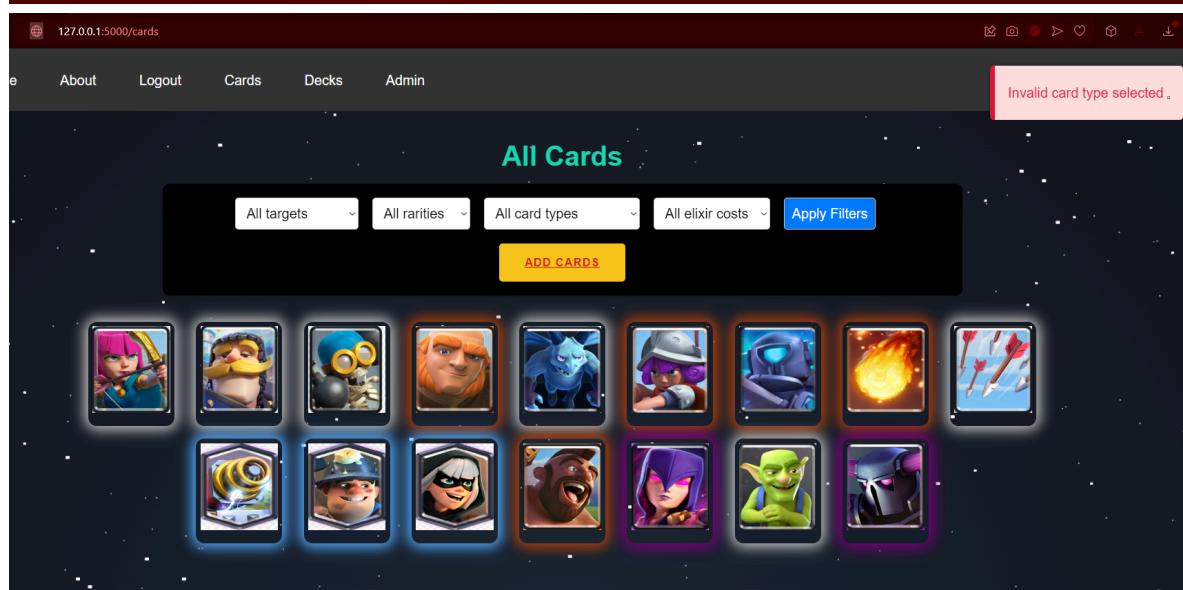
Overflow testing (filters)

When the filters are selected you change the id of the filters in the url it returns with a flash statement saying the id is not available in the database for that particular filter

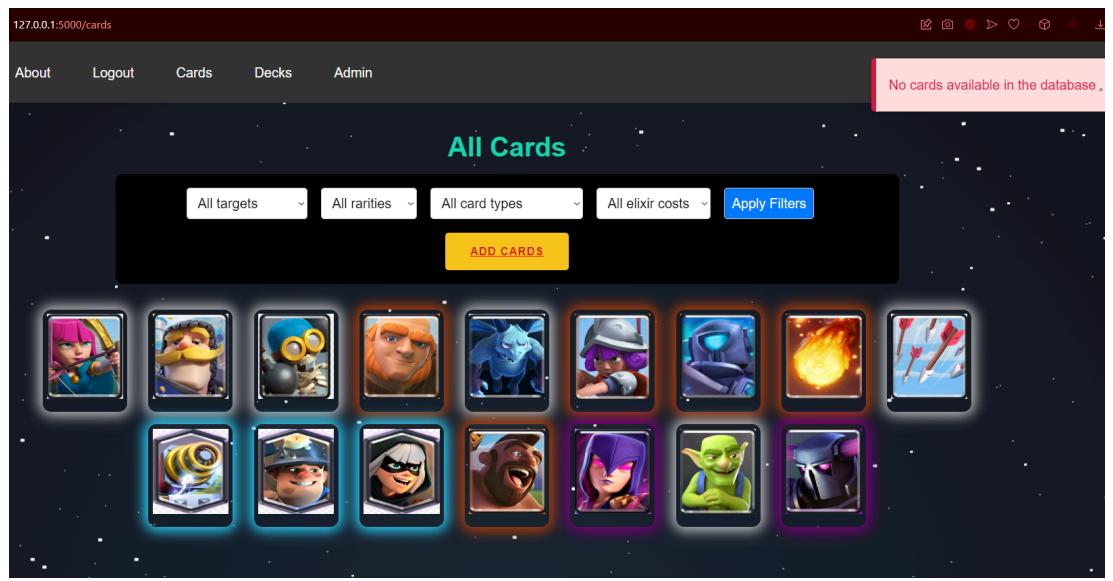
The screenshot displays two browser windows side-by-side. Both windows show a dark-themed interface for a card collection game, likely Clash Royale, featuring a grid of cards. The top window's URL is `127.0.0.1:5000/cards?Target=all&Rarity=all&CardType=all&Elixir=all`. The bottom window's URL is identical but includes an invalid rarity value: `127.0.0.1:5000/cards?Target=0&Rarity=all&CardType=all&Elixir=all`. A red error message box in the bottom window contains the text "Invalid rarity selected.". The card grid in both windows shows various cards from the game, each with a unique icon and name.



127.0.0.1:5000/cards?Target=all&Rarity=all&CardType=238649863429344342334423445243234123214322143213341323241323462634462543423341232346532446524346432644234123345446&Eli



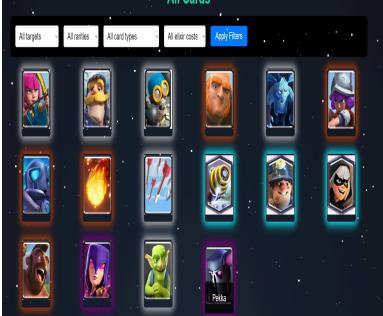
127.0.0.1:5000/cards?Target=all&Rarity=all&CardType=all&Elixir=0



Iteration 9 (card page)

This page will show the info of the card that was selected in the previous page. This will be presented in a table.

Data Integrity

Hover on the link	ID shown in the bottom left of the website	What is in the page	Corresponding ID in the database:																																																																																																																							
	127.0.0.1:5000/card/16	<p>Pekká</p> <p>Description: Hit hard, big damage slow attack speed, slow</p> <p>Rarity: Epic</p> <p>Arena Unlocked: P.E.K.K.A's Playhouse</p> <p>Evolution: ..</p> <p>Speed: Very Slow</p> <p>Special Ability: hgc - None</p> <p>Elixir Cost: 7</p> <p>Targets: ground single</p> <p>Image: </p>	<table border="1"> <thead> <tr> <th>ID</th> <th>Name</th> <th>Rarity</th> <th>Health</th> <th>Attack</th> <th>Speed</th> <th>Elixir</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Arches</td> <td>4</td> <td>1</td> <td>1</td> <td>Medium</td> <td></td> </tr> <tr> <td>2</td> <td>Knight</td> <td>4</td> <td>1</td> <td>3</td> <td>Medium</td> <td></td> </tr> <tr> <td>3</td> <td>Bomber</td> <td>4</td> <td>17</td> <td>1</td> <td>Medium</td> <td></td> </tr> <tr> <td>4</td> <td>Giant</td> <td>3</td> <td>1</td> <td>NULL</td> <td>Slow</td> <td></td> </tr> <tr> <td>5</td> <td>Minions</td> <td>4</td> <td>1</td> <td>NULL</td> <td>Fast</td> <td></td> </tr> <tr> <td>6</td> <td>Musketeer</td> <td>3</td> <td>1</td> <td>NULL</td> <td>Medium</td> <td></td> </tr> <tr> <td>7</td> <td>Min P.E.K.K.A</td> <td>3</td> <td>1</td> <td>NULL</td> <td>Fast</td> <td></td> </tr> <tr> <td>8</td> <td>Fireball</td> <td>3</td> <td>1</td> <td>NULL</td> <td>NULL</td> <td></td> </tr> <tr> <td>9</td> <td>Arrows</td> <td>4</td> <td>1</td> <td>NULL</td> <td>NULL</td> <td></td> </tr> <tr> <td>10</td> <td>Archery</td> <td>1</td> <td>9</td> <td>1</td> <td>Slow</td> <td></td> </tr> <tr> <td>11</td> <td>Mine</td> <td>1</td> <td>9</td> <td>1</td> <td>Slow</td> <td></td> </tr> <tr> <td>12</td> <td>Bandit</td> <td>1</td> <td>6</td> <td>1</td> <td>Very fast</td> <td></td> </tr> <tr> <td>13</td> <td>Hog rider</td> <td>3</td> <td>16</td> <td>1</td> <td>Very fast</td> <td></td> </tr> <tr> <td>14</td> <td>Witch</td> <td>2</td> <td>14</td> <td>NULL</td> <td>Medium</td> <td></td> </tr> <tr> <td>15</td> <td>Goblins</td> <td>4</td> <td>19</td> <td>NULL</td> <td>Fast</td> <td></td> </tr> <tr> <td>16</td> <td>Pekka</td> <td>2</td> <td>14</td> <td>NULL</td> <td>Very Slow</td> <td></td> </tr> </tbody> </table> <p>Column: name Data type: TEXT Table: Card ROWID: 16 Constraints: UNIQUE</p>	ID	Name	Rarity	Health	Attack	Speed	Elixir	1	Arches	4	1	1	Medium		2	Knight	4	1	3	Medium		3	Bomber	4	17	1	Medium		4	Giant	3	1	NULL	Slow		5	Minions	4	1	NULL	Fast		6	Musketeer	3	1	NULL	Medium		7	Min P.E.K.K.A	3	1	NULL	Fast		8	Fireball	3	1	NULL	NULL		9	Arrows	4	1	NULL	NULL		10	Archery	1	9	1	Slow		11	Mine	1	9	1	Slow		12	Bandit	1	6	1	Very fast		13	Hog rider	3	16	1	Very fast		14	Witch	2	14	NULL	Medium		15	Goblins	4	19	NULL	Fast		16	Pekka	2	14	NULL	Very Slow	
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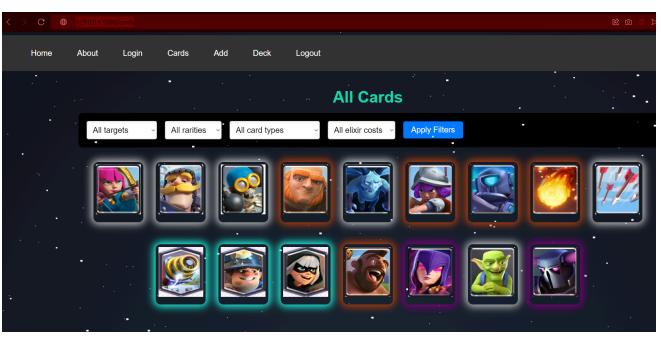
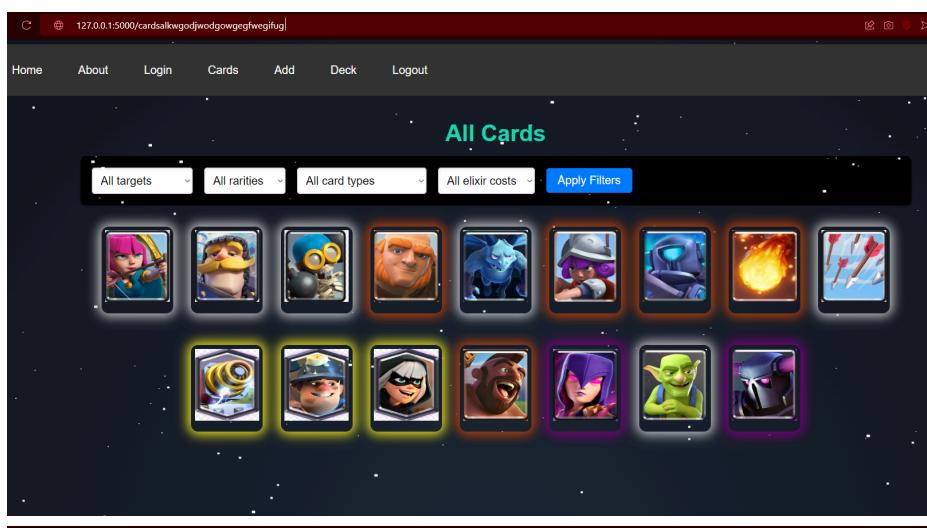
Level	Health	Damage
6	5196	1098
7	5716	1208
8	6287	1329
9	6816	1461
10	7607	1608
11	8368	1768
12	9205	1945
13	10126	2140
14	11138	2354
15	12252	2589

Boundary Testing

Giant	
Description	Slow but durable, only attacks buildings. A real one-man wrecking crew
Rarity	Rare
Arena Unlocked	Training Camp
Evolution	--
Speed	Slow
Special Ability	-
Elixir Cost	5
Targets	building only

The test is for the card page

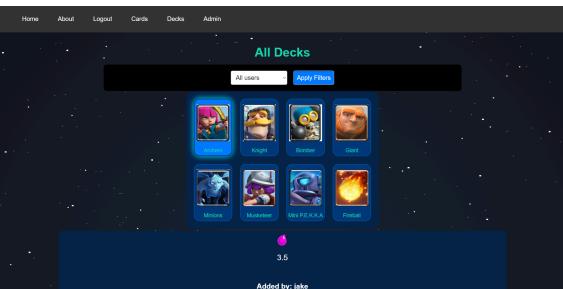
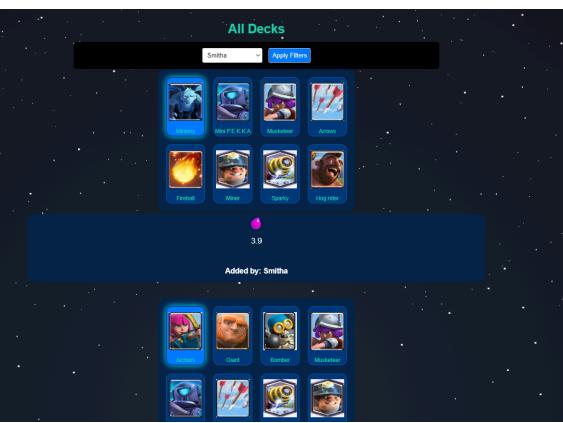
If the Id overflows page will be directed to the all cards page, if the url has letters in it, it will go to the 404 page

	
For all cards page	The same format is applied for all other html pages, if it does not go to a specific app_route then will take you to a 404 error page

Iteration 10 (all_decks)

This page will show all the battledecks added by different users, there is also a filter where you can look for decks by a particular user. They can use this to create their battle deck and increase their win rate.

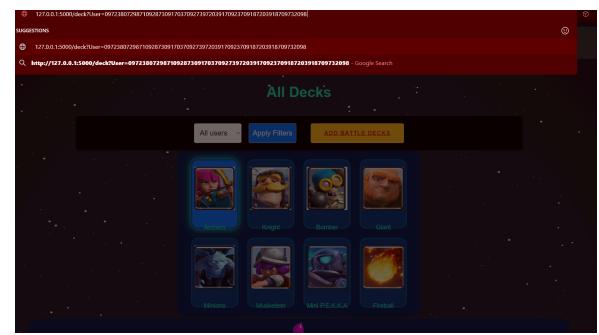
Integrity testing

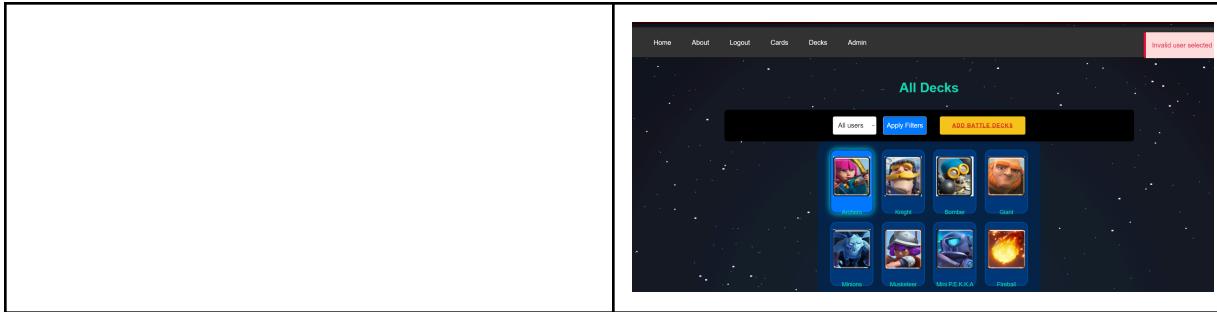
How does it work	Expected outcome	outcome	pass/fail																																																																																																														
Select certain users and will show the battle decks they added	Select form that shows all the users in the database from the select category by checking what decks match with what users	Will show the battle decks from a particular user	<p>Pass</p>   <table border="1" data-bbox="1057 1034 1620 1246"> <thead> <tr> <th>id</th><th>card1_id</th><th>card2_id</th><th>card3_id</th><th>card4_id</th><th>card5_id</th><th>card6_id</th><th>card7_id</th><th>card8_id</th><th>user_id</th></tr> </thead> <tbody> <tr><td>1</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td></tr> <tr><td>2</td><td>2</td><td>1</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>1</td></tr> <tr><td>3</td><td>5</td><td>7</td><td>6</td><td>9</td><td>8</td><td>11</td><td>10</td><td>13</td><td>7</td></tr> <tr><td>4</td><td>1</td><td>4</td><td>3</td><td>6</td><td>7</td><td>9</td><td>10</td><td>11</td><td>7</td></tr> <tr><td>5</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td><td>11</td><td>13</td><td>3</td></tr> <tr><td>6</td><td>4</td><td>10</td><td>9</td><td>15</td><td>1</td><td>3</td><td>2</td><td>6</td><td>7</td></tr> <tr><td>7</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td><td>11</td><td>12</td><td>4</td></tr> <tr><td>8</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td><td>11</td><td>7</td></tr> <tr><td>9</td><td>4</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td><td>11</td><td>12</td><td>7</td></tr> <tr><td>10</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td><td>12</td><td>16</td><td>7</td></tr> </tbody> </table>	id	card1_id	card2_id	card3_id	card4_id	card5_id	card6_id	card7_id	card8_id	user_id	1	1	2	3	4	5	6	7	8	9	2	2	1	3	4	5	6	7	8	1	3	5	7	6	9	8	11	10	13	7	4	1	4	3	6	7	9	10	11	7	5	5	6	7	8	9	10	11	13	3	6	4	10	9	15	1	3	2	6	7	7	5	6	7	8	9	10	11	12	4	8	4	5	6	7	8	9	10	11	7	9	4	6	7	8	9	10	11	12	7	10	5	6	7	8	9	10	12	16	7
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10	5	6	7	8	9	10	12	16	7																																																																																																								

Insert row (Ins)	
	full_name
1	Archers
2	tramdang
3	diggu
4	devan
5	jack
6	devan
7	Smitha
8	devan
9	jake
10	Sam
11	asqw
12	devan
13	dog
14	diggu
15	happy
16	devan
17	benisindamoud
18	god

Overflow testing (deck filters)

When the filters are selected you change the id of the filters in the url it returns with a flash statement saying the id is not available in the database for that particular filter

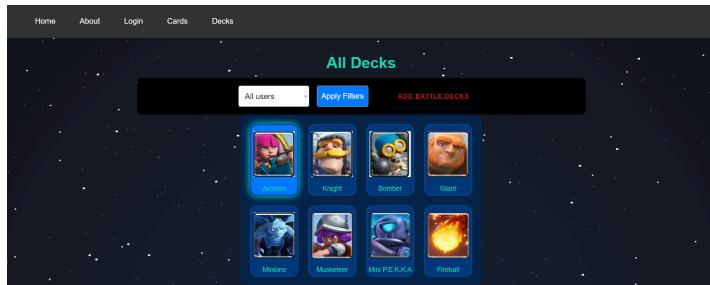
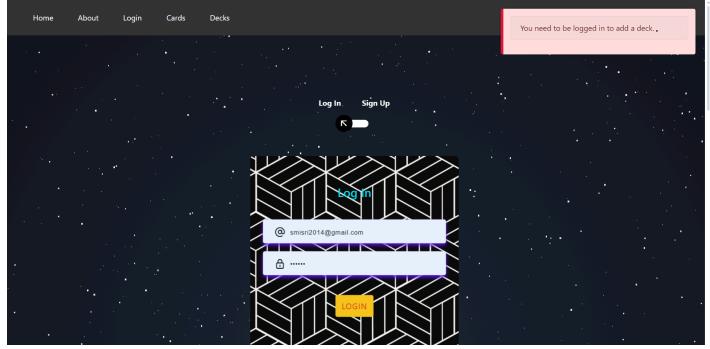


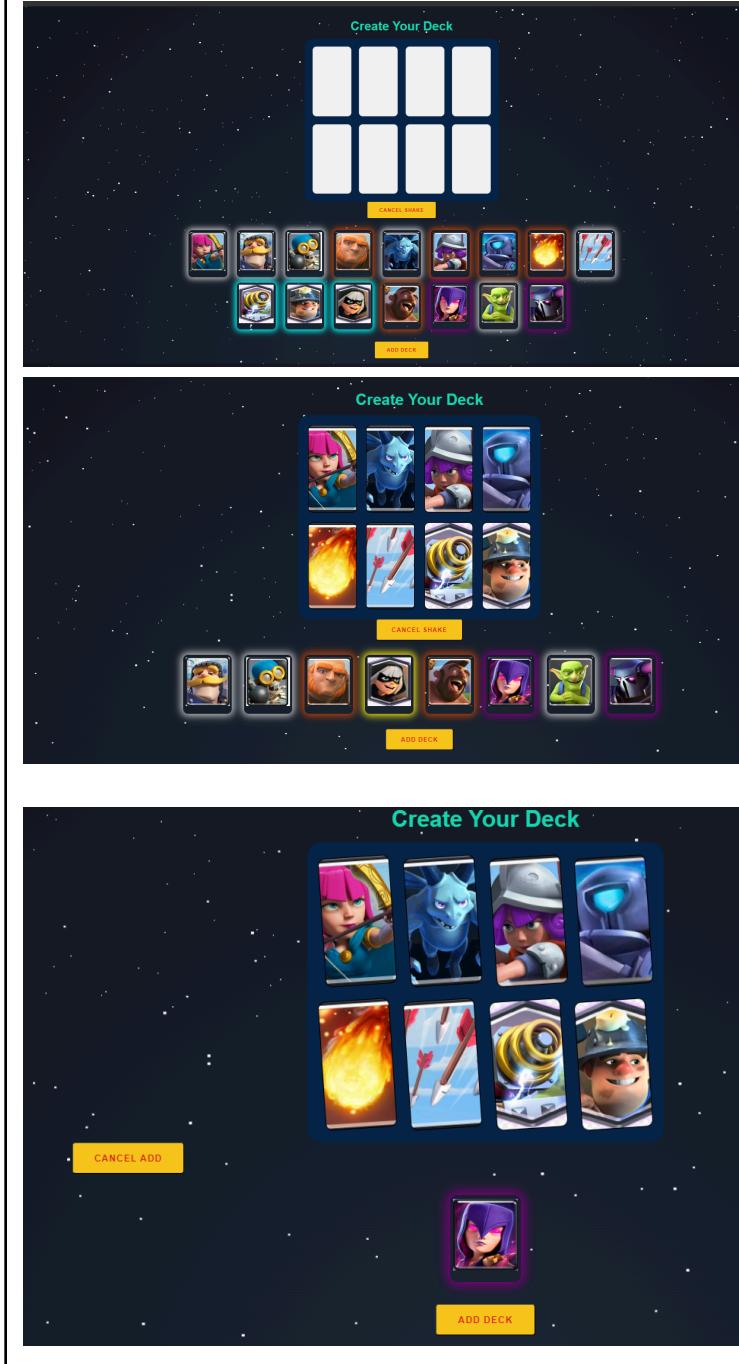


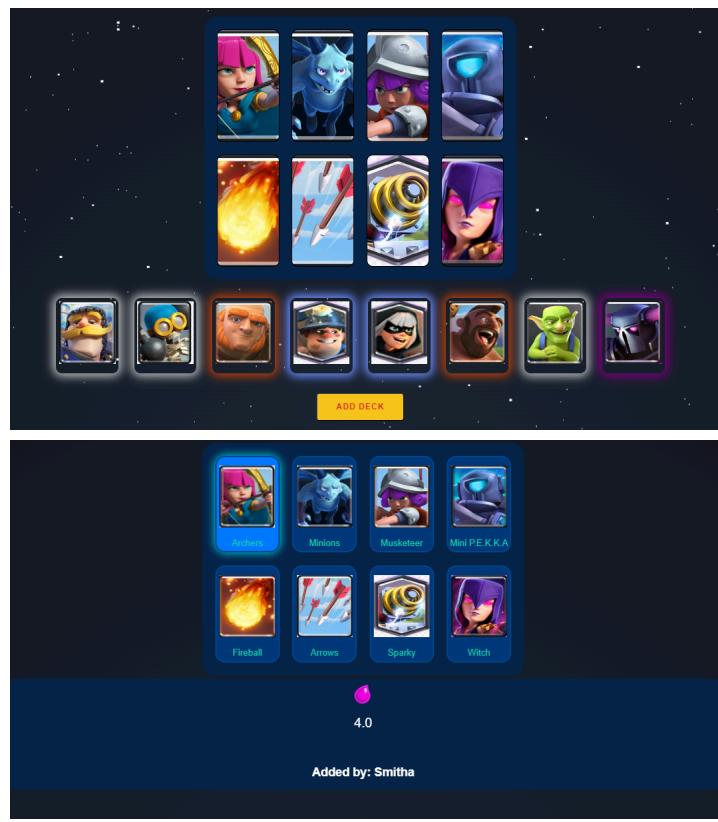
Iteration 11 (Add Deck)

This is where the user is able to add new battledecks that work for them. They can help other players with this battle deck

Tests

How does it work	Expected outcome	outcome	pass/fail
The user has to be logged in to add a battle deck.	If the user is not logged in it will take them to the login page showing them a message saying they need to be logged in to add a new battle deck	As expected	<p>Pass</p>  

<p>The user will be able to select cards and create a battle deck once logged in</p>	<p>The user will add 8 cards to a battle deck and if the deck is full and they click on a card they will be able to change a card from the battle deck. The card they added into the battle deck will not be shown in the list of cards and when the cards have changed they card that was taken out will be shown and the card that was replaced will not be shown. When it is added it will link it with the user that it was added by</p>	<p>As expected</p>	
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id	card1_id	card2_id	card3_id	card4_id	card5_id	card6_id	card7_id	card8_id	user_id
1	1	2	3	4	5	6	7	8	9
2	2	1	3	4	5	6	7	8	1
3	5	7	6	9	8	11	10	13	7
4	1	4	3	6	7	9	10	11	11
5	5	6	7	8	9	10	11	13	3
6	4	10	9	15	1	3	2	6	7
7	5	6	7	8	9	10	11	12	4
8	4	5	6	7	8	9	10	11	7
9	4	6	7	8	9	10	11	12	7
10	5	6	7	8	9	10	12	16	7
11	1	5	6	7	8	9	10	14	7

id	full_name
1	Archers
2	tramdang
3	diggu
4	devan
5	jack
6	devan
7	Smitha
8	devan
9	jake
10	Sam
11	asqw
12	devan
13	dog
14	diggu
15	happy
16	devan
17	life
18	god

Test (forms)

How does it work	Expected outcome	outcome	pass/fail
The website does not enter values more than the given amount	Form does not go beyond the limit except for numbers where it says limit exceeded	As expected	pass
The image entered must only be a jpg or a png format	If the image is not a png or jpg file then it does not commit to the database and returns a message saying file selected type is not the correct one	As expected	Pass

Testing nav pages

Making sure that the navigation links take you to where you are supposed to go

