CBL – "Memory", The Card Game – Backlog

- **_Topic Choice 1: Github_**
  Cooperation on the project will be done over Github. This means that we learned to effectively use the tools it offers such as pushing, pulling, merging and VS code support as well as effective communication using notes and comments.

- **_Topic Choice 2: User Experience (UX) and Game Design_**
  The comfert of the user and the playability of the game are improved aesthetically, such as with animation, sprite rendering, backgrounds and music, as well as functionally, such as exception handeling.

Backlog Items from highest to lower priority:

Name	Rendered Table of Cards	
Description and Demo Method		
The user interface itself must show a set of cards backside up which can be flipped by the player to reveal its face.	Demo: After the user starts the game, they will see a set of cards backside up that can be flipped individually by clicking on them. If they are not pair, they will return to being unflipped.	
Name	Card Pairing	
Description and Demo Method		
Each card on the table must have a corresponding pair. The player must flip 2 cards at a time and memorize where potential pairs are. Each pair found adds a point for the player. Pairs that are found will remain facing up. Cards whose pair isn't found will stay face-side-down.	Demo: Two cards which are corresponding pairs can be flipped after the game is started through the title screen. When this is done, the players score must increase by one, and the pair will remain flipped.	

Name	Sprite Animation and Direction	
Description and Demo Method		
The Queen and King are animated, in the sense that they float up and down with their shadows changing and always face the player	Demo: Flip both King or Queen cards, after which they will approach the player. Note their animation and that they always face the player.	

Name	Combat Music	
Description and Demo Method		

Music is another element of the User Experience. Combat music is played when the player is fighting the enemies.	Demo: Flip two king or queen cards, after which the combat music starts. When slaying the enemy, the music will stop.
Name	Sound Effects
Description and Demo Method	
Different sound effects are played for various events to enhance the UX. This includes flipping a card, unflipping a card, the player being hurt, and the player swinging their sword.	Demo: Flip any card, after which a flip sfx should play. If two wrong cards are flipped or the round is being started, the unflip sound is heard. Swing the players sword to hear the swing sfx. If the queen or king are spawned by flipping their cards, and they attack the player, the players scream will be heard.

Name	Welcoming Guide
Description and Demo Method	
In order to guide users, a window with a brief introduction to the game is shown. This will include the controls of the game aswell.	Demo: A JFrame with text will appear when running the program.

Name	Shuffle algorithm
Description	Demo Method
Cards are shuffled randomly each round	Start a few rounds, the card positions change every time.
Name	Cards load correctly
Description	Demo Method
The game loads all the card images (front and back) into memory from the res folder.	Start the game and the cards appear with images and no error messages in the console.
Name	Cards are created
Description	Demo Method
The game makes 16 cards (8 of which are matching pairs) and stores them.	Start the game and see all 16 cards on the screen (8 pairs in total).
Name	Cards appear in a grid
Description	Demo Method
Cards are placed neatly in rows and columns on the board.	Start the game and cards are laid out evenly with space between them, no overlap.
Name	Cards preview (1,5 seconds)
Description	Demo Method
At the start all cards are shown face-up for 1.5 seconds before flipping down.	Start the game, cards are face-up, wait 1.5s and they flip back down.

Name	Player movement	
Description		Demo Method
The Jester (player) can move using WASD keys around the board.		Press WASD keys and Jester moves on the screen.
Name	Flip one card	
Description		Demo Method
When the Jester stands on a card and presses space the card flips face-up.		Move Jester onto a card, press Space and the card turns face-up.
Name	Flip two cards only	
Description		Demo Method
The player can flip only two cards at once. No third card can flip until those two are checked.		Flip two cards, try to flip a third; nothing happens until they're matched or flipped back.
Name	Matching cards stay face-up	
Description		Demo Method
If the two cards have the same pattern, they stay face-up and increase the player's score.		Flip a matching pair, both stay visible, points number goes up by one.
Name	Mismatched cards flip down after 1 second	
Description		Demo Method
If the two flipped cards don't match, they stay visible for about 1 second, then automatically flip back.		Flip two different cards, wait 1 second and they flip back down
Name	Enemy spawns (King or Queen)	
Description		Demo Method
Matching special cards (King or Queen) spawns that enemy and starts battle music.		Match two King cards and King appear. Match two Queen cards and the Queen appear.

Name	Sword attack	
Description		Demo Method
When the player presses the space bar, Jester slashes and damages enemies on contact.		Press space bar, Jester slashes and when close to King or Queen, their HP bar decreases.
Name	Enemy contact damage	
Description		Demo Method
If the King or Queen touch the Jester, he loses 1 HP and plays a hurt sound		Let an enemy touch Jester, HP goes down and hurt.wav plays.
Name	Enemy defeat	
Description		Demo Method
When an enemy's HP reaches zero, it disappears and battle music stops		Attack the enemy, when its HP = 0 it vanishes and the music stops.
Name	Timer countdown	
Description		Demo Method

The game timer starts at 60 seconds and counts down every second. A warning tick sound starts playing at 20 seconds remaining.	Start the game, watch timer, at 20s remaining hear warning ticks.
Name	Try Again button restart
Description	Demo Method
Clicking the "Try Again" button resets everything: timer, HP, cards, enemies, and score.	Click button, round restarts with full HP, new cards and reset timer.
Name	Arena background
Description	Demo Method
The background image is shown behind all game elements.	Start game, arena image is visible behind cards, player, and enemies.
Name	Health and Points
Description	Demo Method
Shows the player's current HP and total points at the top of the screen.	Play normally, HP decreases when hit, points increase when matching pairs.