



# INTRODUCTION TO GAME DESIGN

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CSD2511 – Week 02

Lecturer . Jonathan Kwek

# Before we begin

- Use the first 15 minutes to settle in
  - Sign your attendance
  - Log into your workstation
  - Log into Moodle, specifically CSD2511 module
  - Log out from your game, application, communication, chats
  - Prime yourself physically for the next hour, ie. Finish your food, fill up your water, visit the restroom, get comfy
  - Prime yourself mentally for the next hour, ie. Recall what happened during last week's session, put a save point on any ongoing conundrums, meditate on what to do this morning



Recap

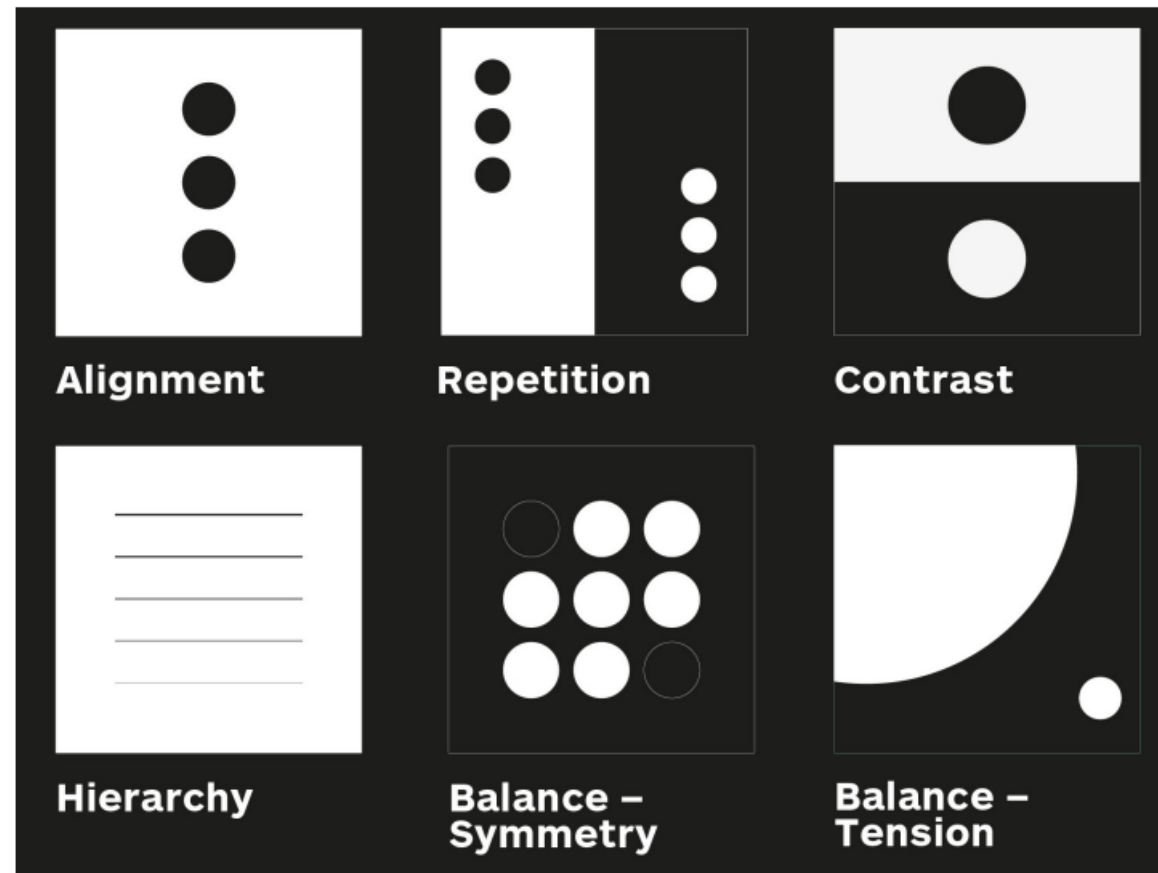
# Before this Friday

WEEK 01 - TUESDAY

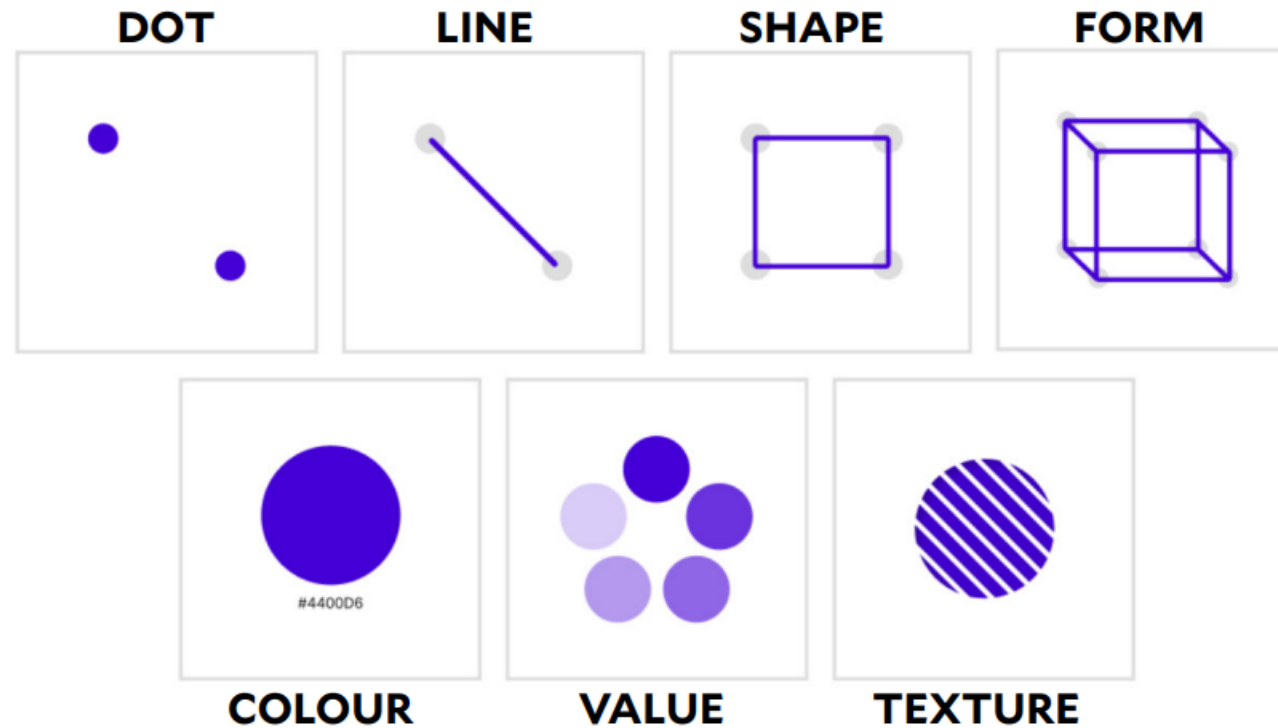
- Register a Figma account
- Do not form teams just yet
- Check out some card games!
  - [https://store.steampowered.com/app/1367020/Storybook\\_Brawl/](https://store.steampowered.com/app/1367020/Storybook_Brawl/)
  - [https://store.steampowered.com/app/544810/KARDS\\_\\_The\\_WWII\\_Card\\_Game/](https://store.steampowered.com/app/544810/KARDS__The_WWII_Card_Game/)
  - [https://store.steampowered.com/app/1449850/YuGiOh\\_Master\\_Duel/](https://store.steampowered.com/app/1449850/YuGiOh_Master_Duel/)
  - [https://store.steampowered.com/app/1284410/GWENT\\_The\\_Witcher\\_Card\\_Game/](https://store.steampowered.com/app/1284410/GWENT_The_Witcher_Card_Game/)
  - <https://magic.wizards.com/en/mtgarena>
  - <https://www.pokemon.com/us/pokemon-tcg/play-online/>

# PRINCIPLES OF DESIGN

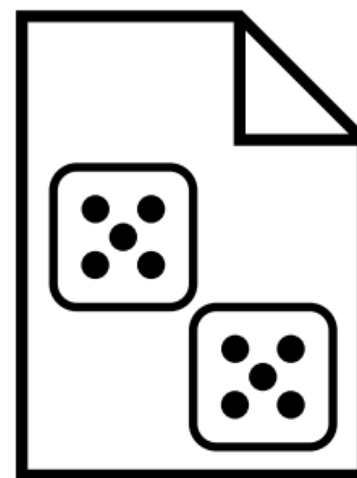
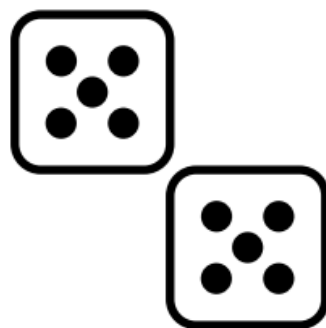
WEEK 01 - THURSDAY



# ELEMENTS OF DESIGN



WEEK 01 - THURSDAY



~5,000+ B.C.      ~3,000 B.C.      ~700 A.D.      ~900 A.D.

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**Component**

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**Material****Purpose**

WEEK 01 - THURSDAY

Dice

Cube

Cards

Paper

Generate random numbers  
and form combinations

Dominos

Tablet

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Mechanic	Description	Example(s)
Outlay	Play a card from hand	
Exchange	Exchange cards with others or pool Swap cards with others Pass cards to others Take cards from others	Cuckoo Old Maid, Spoons Go Fish, Quartets
Compare	Compare cards with others Banking: compete against common source Vying: bet against other players and fold Showdown: compare hands with others	Baccarat, Blackjack Poker, Brag Bone Ace, Ging
Take Tricks	Win trick by playing one card in a round	Euchre, Hearts
Match	Form groups and combinations	Rummy, Mahjong
Accumulate	Take all the cards	War, Slapjack
Shed	Get rid of all your cards	Crazy Eights, Speed
Fish	Capture cards from a common pool	Cassino, Scopa
Draw and Discard	Draw one card, discard another	Canasta, Golf

WEEK 01 - THURSDAY

# Module Matters

- Scam warning
- Module Profile
- Afternoon sessions
- Assignment Brief

# Today



- Figma workshop
- Gallery Walk
- Team formation

## Figma Workshop

- Complete workshop tasks within 30mins
- Copy your works to < Gallery Walk >
  - <https://www.figma.com/file/xkJyDh6BDVxVTpv34LMzZ9/GalleryWalk?type=design&node-id=0%3A1&t=SzrOhhIGmkRIJjYb-1>



## Basic Figma Operations

- ☐ Create **Team**
- ☐ Create **Design File**
- ☐ Create **Frame** → set dimensions of Frame → Rename Frame
- ☐ Place a few **Shapes** inside of Frame → Group them together
- ☐ Add **Text** → Font/Fill/Stroke
- ☐ Place **custom image**
- ☐ Create colour palette using **Local Styles**
- ☐ Export PNG

## CREATE YOUR OWN PLAYER CARD

- Create your own Animal Spirit Trading Card using Figma and post it in the Gallery Walk link
- You must comply with certain guidelines, but you are free to decide on the layout, colours, orientation and avatar image
- You will need to input some data into the card, please do so as honestly as possible

# #1 PARAMETERS

## ❖ Card Name

- You must give your Animal Spirit a name
- You may affix a title to its name, “Ron the Ambitious” (from table)
- You must define your Animal Spirit (from table)
- You must define its active time-of-day (from table)

RON

*Name of your Animal Spirit*

The Ambitious

*Title*

Ape Spirit

*Type of Animal Spirit*

Dawn

*Active Time of Day*

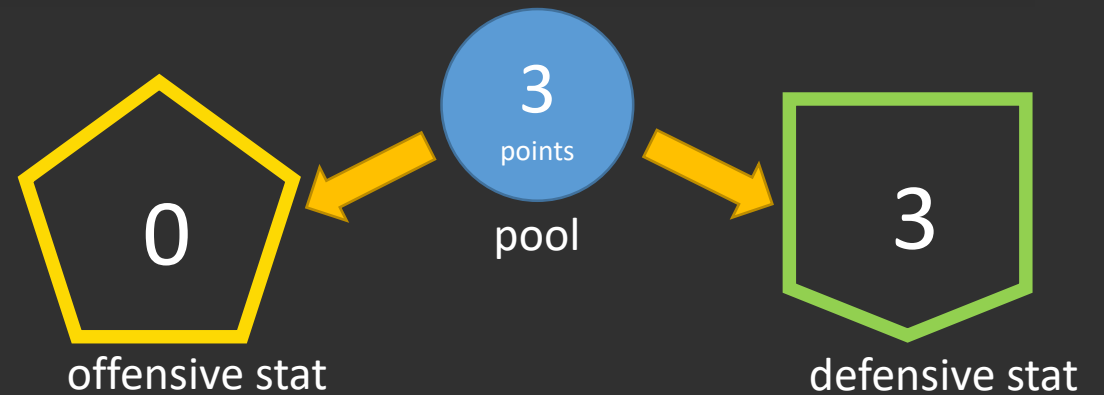
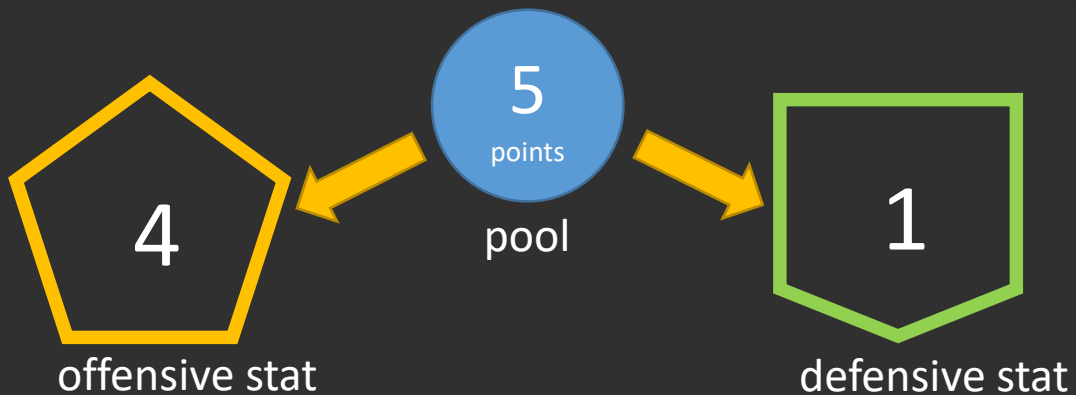
Title	Spirit Type	Active Time of Day
Dominator	Cat Spirit	Dawn
Slayer	Dog Spirit	Noon
Victorious	Bear Spirit	Dusk
Creative	Bird Spirit	Midnight
Wise	Ape Spirit	
Artist	Reptile Spirit	
Giant	Dinosaur Spirit	
Builder	Equine Spirit	
Epic	Pig Spirit	
Reader	Fish Spirit	
Tinkerer	Insect Spirit	
Collector	Plant Spirit	



# #1 PARAMETERS

## ❖ Stats

- Your card must display TWO stats:
  - an OFFENSIVE stat and a DEFENSIVE stat
- You may decide what value each stat is, by assigning *points* from a *pool*
- There must be at least 1 point in the DEFENSIVE stat
- To determine how many points is in your pool, see next slide



# #1 PARAMETERS

## ❖ Point Pool

	Condition	Points received
<input type="checkbox"/>	If you are born between January and June	+3 points
<input checked="" type="checkbox"/>	If you are born between July and December	+2 points, -1 cost
<input type="checkbox"/>	If you enjoy playing PC/Console games	+1 point
<input checked="" type="checkbox"/>	If you enjoy playing tabletop games	+1 point
<input type="checkbox"/>	If you have any accomplishments or titles in gaming, please include in the card	+1 point
+3 <input type="checkbox"/>	Roll a 1d4	+1d4 point(s)

6  
points

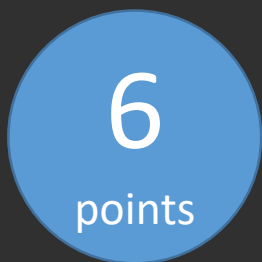
-1 Cost

# #1 PARAMETERS

## ❖ Cost

- Your card must display a COST stat
- The COST stat is derived from the sum total of points in the pool
- Refer to the table below

Total Points in Pool	COST
If the total points in pool is 3/4/5	Cost = 1
If the total points in pool is 6/7/8	Cost = 2
If the total points in pool is 9/10	Cost = 3



-1 Cost



# #1 PARAMETERS

Make sure you have the following parameters:

1. Card name
2. Offensive stat
3. Defensive stat
4. Cost
5. Gaming title/accomplishment (if any)

## #2 MEDIA

### ❖ Avatar

- You must display an image to represent your Animal Spirit
- You may download and modify an image from Flaticon.com
  - <https://www.flaticon.com/>
- You may create your own image
- If you drew the art yourself, please credit at the bottom
  - © Your Name



## #2 MEDIA

### ❖ Icons

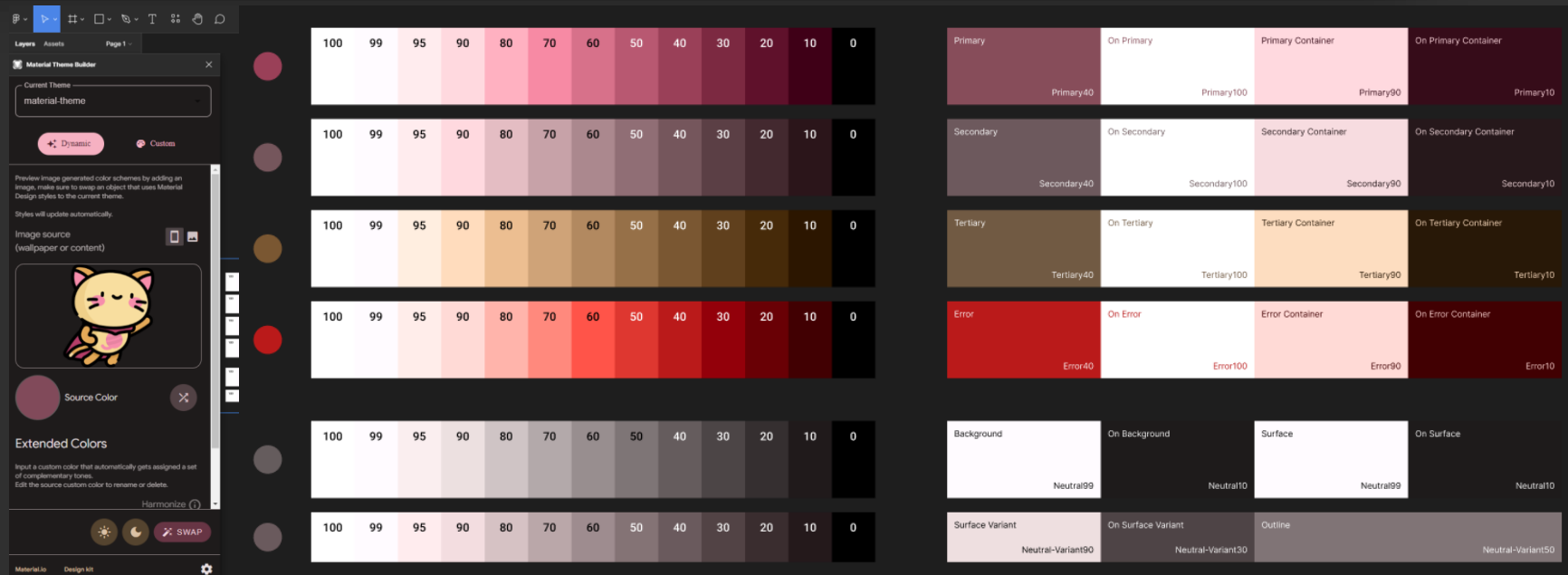
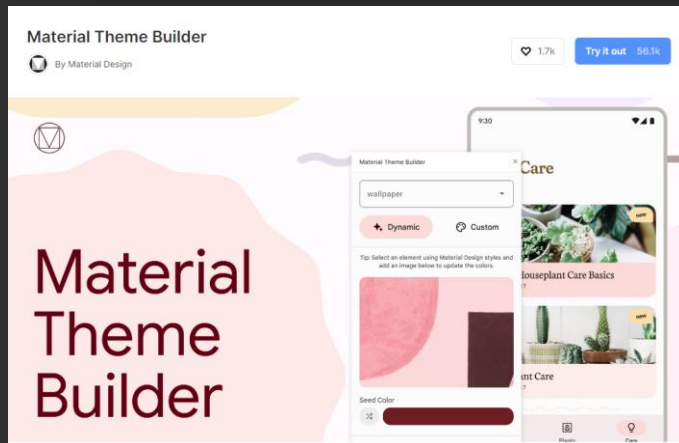
- You may use icons from Kenney art assets without attribution
  - <https://www.kenney.nl/assets/board-game-icons>



# #3 COLOURS

## ❖ Colour Palette

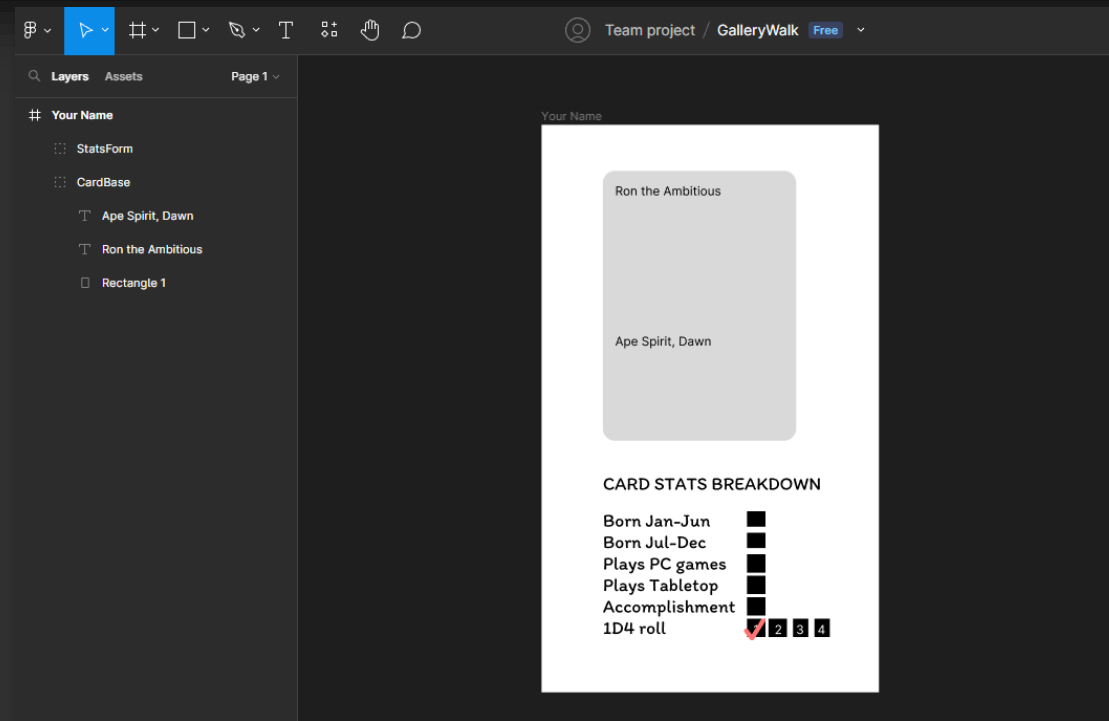
- You must create a colour palette before assigning colours to your card
- Use Figma's MATERIAL THEME BUILDER plugin to generate a colour palette from a reference image
  - <https://www.figma.com/community/plugin/1034969338659738588/Material-Theme-Builder>



# #4 LAYOUT

## ❖ Dimensions

- You must create a FRAME in Figma measuring W110 x H185
- Rename the FRAME with your full name
- You must create a CARD BASE within the frame measuring W63 x H88 for Portrait, or W88 x H63 for Landscape





## #4 LAYOUT

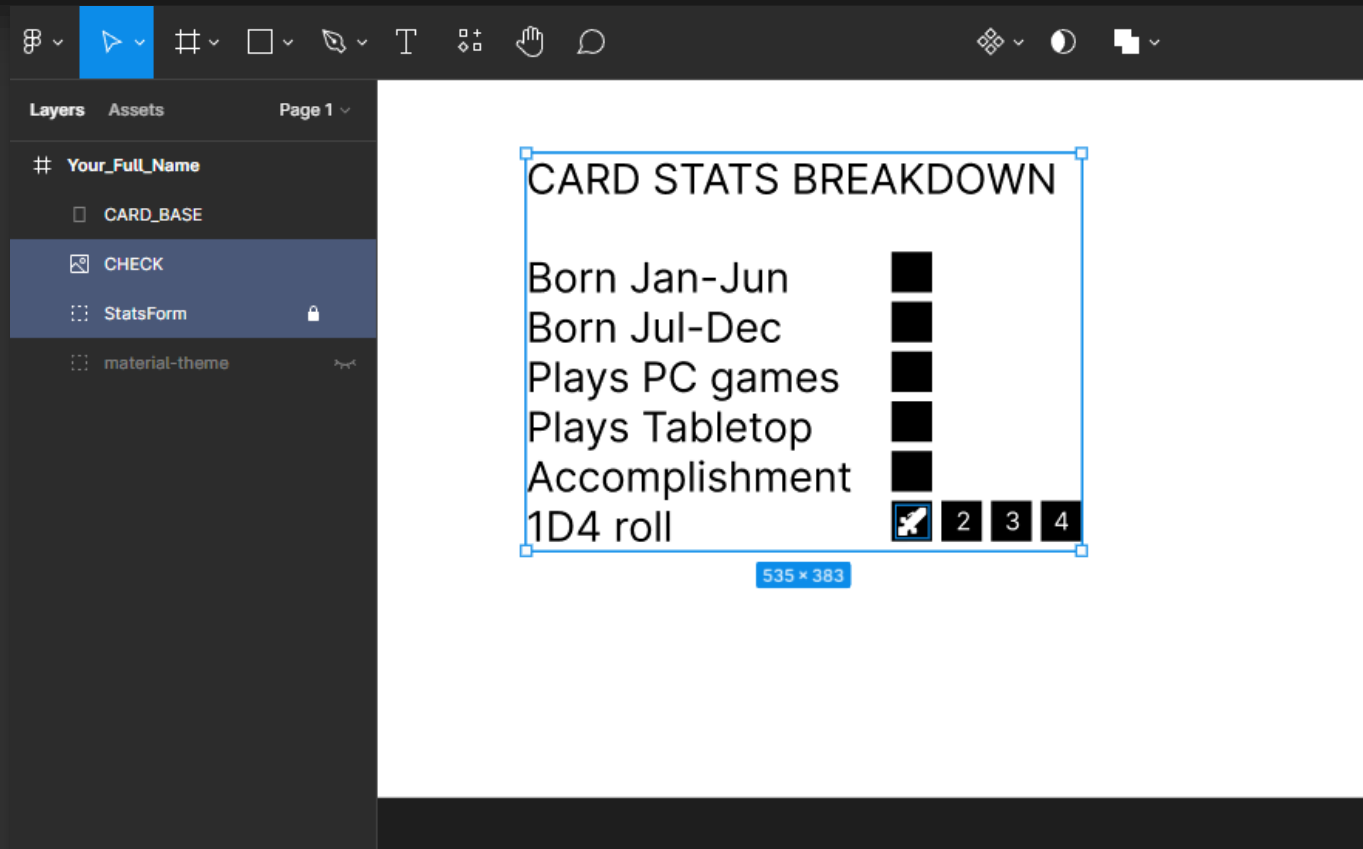
### ❖ Orientation

- You may choose the orientation of your card: Portrait or Landscape

# #4 LAYOUT

## ❖ Stats Breakdown

- Copy the StatsForm and CHECK objects to your Frame
- Use the CHECK object to indicate your breakdown of points



## Figma Workshop

- Complete workshop tasks within 30mins
- Copy your works to < Gallery Walk >
  - <https://www.figma.com/file/xkJyDh6BDVxVTpv34LMzZ9/GalleryWalk?type=design&node-id=0%3A1&t=SzrOhhIGmkRIJjYb-1>



30 mins begins now! Remember to have fun with it!



# Gallery Walk



# AN ADVENTURE IN 40 CARDS



Shigeru Miyamoto, Nintendo





# Assignments

## *Prototype A* – AN ADVENTURE IN 40 CARDS

- ❖ Group Work – 4 team members (*assemble by beginning of Week 2*)
- ❖ Pitch and prototype a solo(1 player) card game that takes place within a modern(2023) context(please define)
  - ❖ 1x 4 panel narrative pitch
  - ❖ 1x A4 page rules and setup
  - ❖ 40x card deck
  - ❖ Dice and tokens allowed, no more than 20 in total
  - ❖ No maps/board allowed; game is designed around mechanics and choices
  - ❖ Individual - 2x card DLC per team member (total 8)
  - ❖ More details in separate doc
- ❖ Submit by **beginning** of Week 5 (FIGMA/MOODLE)
- ❖ Live presentation and recording in Week **5**

# Brainstorm



Protagonist's  
Profession  
(Player)



Modern  
Context



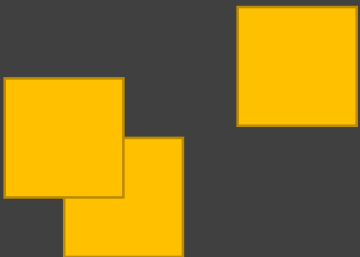
Adventure  
High Concept



Objective



Mechanics



Obstacles



Core Game Loop



Reward Fantasy



# Brainstorm



- Layers Assets Page 1
- Group 32
  - Group 28
  - Group 24
  - Group 31
  - Group 27
  - Group 23
  - Group 30
  - Group 25
  - Group 29
  - Group 26
  - Group 22
  - Group 21
  - A4 300dpi
  - Week1

JK:  
Let's create an adventure within a workplace setting!


JK:  
Coffee barista who has run the cafe on her own because her boss is sick for the day!

JK:  
Game developer who has an anniversary dinner date but needs to check in his code by 6pm!

JK:  
Nurse who needs to contain a zombie outbreak at her clinic from spreading to the outside world!

The screenshot shows a digital workspace with a dark grey background. On the left, there is a vertical sidebar with a list of groups: Group 32, Group 28, Group 24, Group 31, Group 27, Group 23, Group 30, Group 25, Group 29, Group 26, Group 22, Group 21, A4 300dpi, and Week1. The top of the workspace has a header bar with various icons and text: "Projects / CSD2510\_FALL2022\_PLAYERCARD (Copy) Free". On the right side, there are three yellow sticky notes. The top note says "JK: Making Good Coffee". The middle note says "JK: What is the core mechanic or game loop expected of the profession?". The bottom note says "JK: Caring for patients, administering injections, packing medications".

# Brainstorm



Projects / CSD2510\_FALL2022\_PLAYERCARD (Copy) Free

Layers Assets Page 1

- Group 32
- Group 28
- Group 24
- Group 31
- Group 27
- Group 23
- Group 30
- Group 25
- Group 29
- Group 26
- Group 22
- Group 21
- A4 300dpi
- Week1

JK:

Too many orders!  
Too little coffee!  
Unreasonable customers!

JK:

What are the potential  
obstacles the player has  
to overcome?

JK:

Random Bugs!  
Meetings!  
Undocumented code!

JK:

No killing patients policy!

# GAME NARRATIVE

- 1 SET UP**

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- 2 OBSTACLE**

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- 3 STRATEGY**

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- 4 GOAL**

# Narrative Pitch



Frame 1

Set up

Frame 2

Obstacle

Frame 3

Strategy

Frame 4

Goal

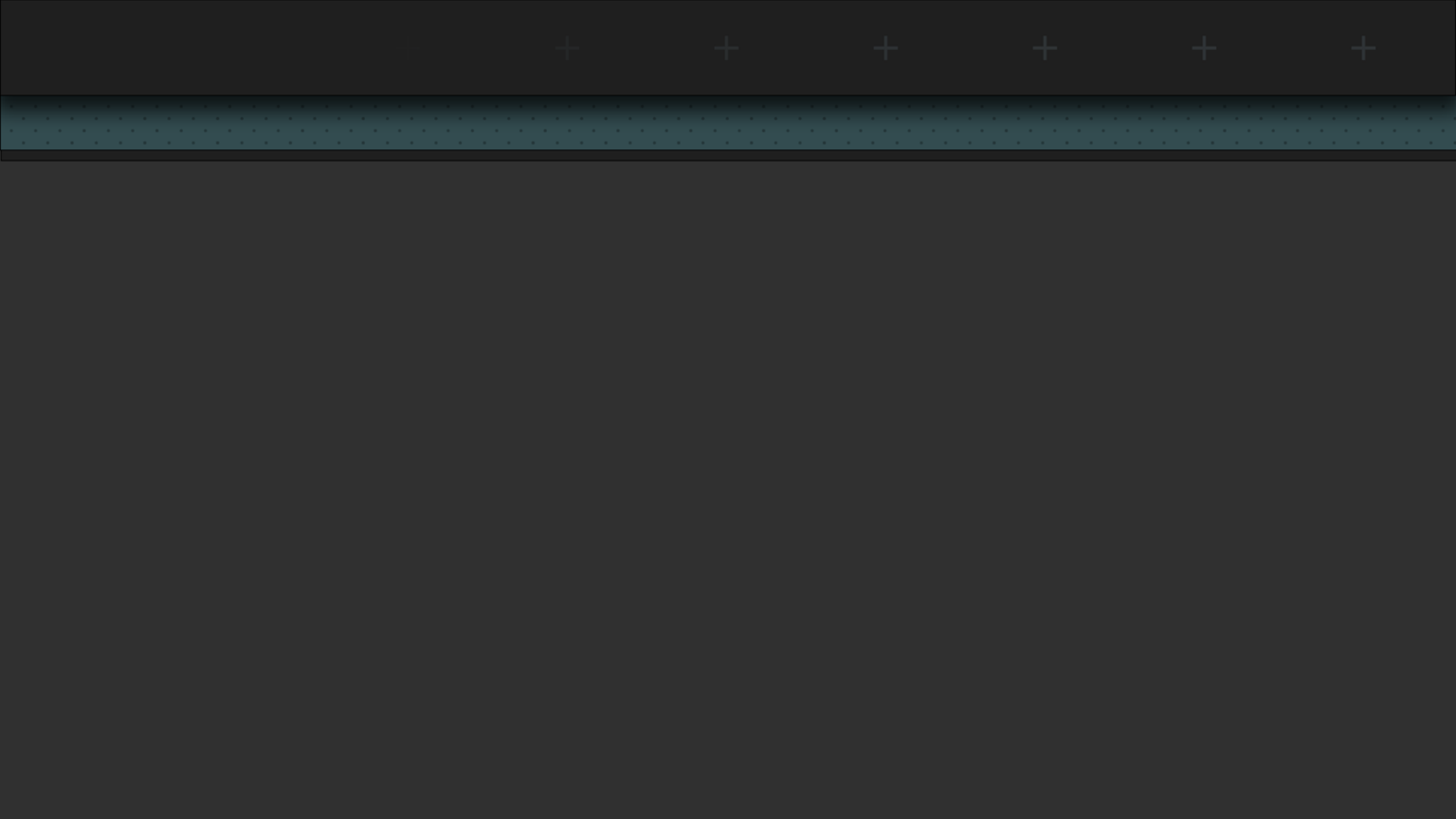


*What else is there?*

Shigeru Miyamoto, Nintendo









# DESIGN FOR DRAMA

# An Adventure in 40 Cards

Design a solo-player tabletop card game, **for ages 16 and above**. The objective of the game is to set players on an adventure within a modern context, as the main protagonist with a clear and epic goal to achieve, through physical play using cards; dice and tokens are allowed to supplement the gameplay.

The gameplay and its systems should be engaging for its target audience, and must be provide different experiences during multiple playthroughs. **The average playtime should be around 30-45mins per session.**

# An Adventure in 40 Cards

- One ZIP file, “CSD2511\_TeamNumber\_A\_GameName.zip”, containing the following:
  - A text file with team member names and link to Figma page
  - A PDF softcopy of the game’s narrative pitch
  - A PDF softcopy of the rule book – a detailed explanation of the game’s components, rules, board set up and objectives
  - A PDF softcopy of a Print&Play version of your game – all gameplay components must be laid out, ready for print
    - Cards – gameplay components detailing game rules, events, actions, tasks, etc.
    - Dice – gameplay components for generating randomness (optional)
    - Tokens – gameplay components for keeping track of the game state, ie. players, cash, score, etc. (optional)
  - A PDF softcopy from each team member containing a 2 card DLC designed by that team member (total 4)

# An Adventure in 40 Cards

## DESIGN SPECIFICATIONS

- Narrative pitch must be in a 4-panel format
- Rulebook is limited to a maximum of two A4 sized pages
- Gameplay cards are must be exactly 40 in total
- Dice and tokens are optional, and limited to a maximum of 20 in total
- No map, board or positional strategy allowed
- No social mechanics and dexterity based mechanics allowed; mechanics must be based on a quantifiable system established within the cards and rules
- Gameplay “soft-locks”, unexpected game-breaking events or easily exploitable strategies will result in heavy penalties
- The game must have a clear objective/goal(s) for which the player can achieve and conclude the game
- The actions and turn order that players may take or have to take in order to achieve said goal(s) must be clearly articulated
- Ensure that the game has a reasonable amount of random events/resolution mechanics to make outcomes unpredictable, but also provide ways to mitigate the randomness so as to avoid extreme scenarios
- The rules must be thorough and detailed in order to avoid ambiguity and confusion
- The rules must be fair and balanced
- The game systems and mechanics must be thematically relevant and coherent to its proposed fantasy
- The game’s theme and language must be socially sensitive and respectful towards religions, race, genders and the game’s target age group

# An Adventure in 40 Cards

- Submission Deadline:
  - Week 5
  - 29<sup>th</sup> May Monday 11.59pm

# An Adventure in 40 Cards

Rubric	Value
<b>Compliance</b> Whether the project adhered to the requirements of the deliverables	Excellent/Very Good/Good/Fair/Adequate
<b>Rules</b> Whether the rules stated in the rulebook adequately and accurately explained how the game is played and resolved, as well as all its gameplay components	Excellent/Very Good/Good/Fair/Adequate
<b>Gameplay</b> Whether the game offered an engaging and smooth flow of activity of its players, with a clear objective to base their strategy and choices on, as well as mechanics that are easy to learn and apply	Excellent/Very Good/Good/Fair/Adequate
<b>Theme</b> Whether the game had a creative and appealing theme that made its game rules and mechanics feel intuitive	Excellent/Very Good/Good/Fair/Adequate
<b>Quality</b> Whether the physical design of the game's components are articulated with good visual clarity and aesthetic appeal	Excellent/Very Good/Good/Fair/Adequate



# An Adventure in 40 Cards

## ❖ Application of game design fundamentals

- ❖ Clear objective and rules
- ❖ “Good” mechanics and flow
- ❖ Randomness and Luck mitigation
- ❖ Replayability

# An Adventure in 40 Cards

## *Live Presentation*

- *Even though submission doesn't require it, you will need either a physical or digital version of your game in order to demonstrate and explain your game*
- *Your presentation will be recorded live*

# An Adventure in 40 Cards

## FAQ

- Cards do not have to be in a single deck, can be split into different functions
- A card is not a token and vice versa
- A “layout board” is allowed but only if the positions do not affect the gameplay
- Card dimensions/shape/design is entirely up to you, no restrictions
- Don't be distracted by the title of the assignment
- DLC cards do not add to the 40 card count; core game must be playable without DLC



# TEAM FORMATION

- Move your card into your team's box
- If you see an empty slot, you may join that group

1	2	3	4	5
6	7	8	9	10
11	12	13	14	15
16	17	18	19	20
21	22	23	24	25

# TEAM FORMATION

Get to know your team!

- Play a game together
- Make a game together, like a 90 min game jam

# HOMEWORK

- Play FLUXX on Board Game Arena with a teammate
- <https://boardgamearena.com/gamepanel?game=fluxx>

The screenshot shows the BGA website interface for the game FLUXX. At the top, there's a navigation bar with 'PLAY NOW', 'NEWS 10', 'GAMES', 'COMMUNITY', and 'FORUMS'. The main header features the large, colorful 'FLUXX' logo. To the right of the logo, there are tags for 'Surreal/Silly/Absurd', 'Cards', 'Random', 'Hand management', and 'Party game'. Below these, it indicates '2 - 6' players, '7 mn' duration, and 'Complexity: 2 / 5'. A button 'Add to favorites' is also present. The 'About' section describes the game as 'The Card Game With Ever-Changing Rules!' and provides details: 'Designed by Andrew Looney', 'Art by Andrew Looney', 'Published by Looney Labs', 'Year 1997', and 'Developed by Alex\_erson, wolmot'. It also mentions '1999 Mensa Select Winner'. On the left, there's a small image of the FLUXX game box. On the right, a preview window shows a game in progress with various cards and a chat area. At the bottom, there are three large buttons: 'Learn', 'Or', and 'Play'. The Looney Labs logo is in the bottom left corner.

BGA Splendor...

PLAY NOW NEWS 10 GAMES COMMUNITY FORUMS

# FLUXX

Surreal/Silly/Absurd Cards Random Hand management Party game

2 - 6 7 mn Complexity: 2 / 5

Add to favorites

## About

The Card Game With Ever-Changing Rules!

It all begins with one basic rule: Draw one card, Play one card. But New Rule cards quickly make things chaotic...

Even the object of the game will often change as you play, as players swap out one Goal card for another. Can you achieve World Peace before someone changes the goal to Bread and Chocolate?

1999 Mensa Select Winner

Designed by **Andrew Looney**  
Art by **Andrew Looney**  
Published by **Looney Labs**  
Year **1997**  
Developed by **Alex\_erson, wolmot**

Watch a **game in progress** (164 games)

Learn Or Play

LOONEY LABS

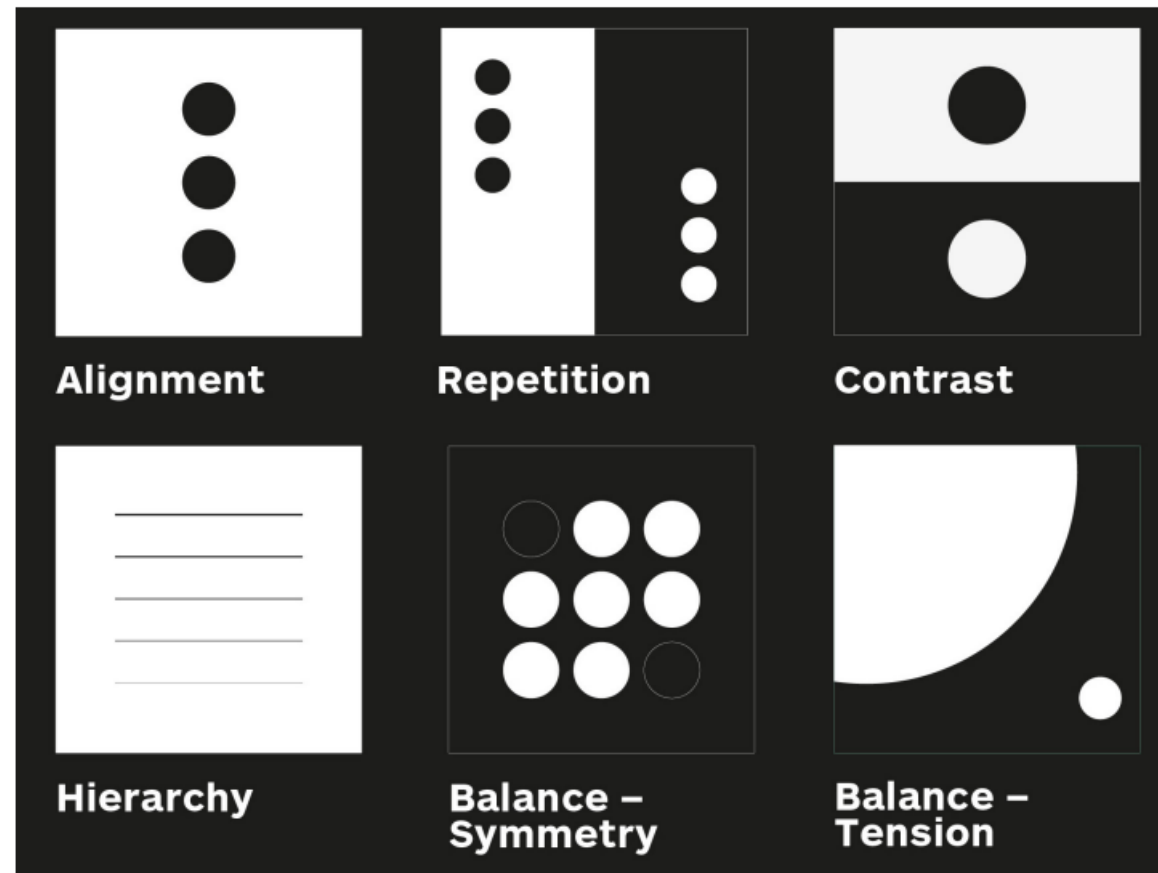
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Draw and Discard	Draw one card, discard another	Canasta, Golf

WEEK 01 - THURSDAY



# PRINCIPLES OF DESIGN

WEEK 01 - THURSDAY



# TEAM FORMATION

- Physically gather in your teams now and introduce yourselves
  - You could start with explaining your Animal Spirit card to the team
  - Create your own team Figma link

1	2	3	4	5
6	7	8	9	10
11	12	13	14	15
16	17	18	19	20
21	22	23	24	25

End

+

+

+

+

+

+



