

Innovative teaching and learning path for the prevention of new drugs abuse (INES)



Prototyping Material - User Manual

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Introduction

This material will be your interactive storytelling building companion.

The main idea of this project is to enable students to write a video game story and articulate it with game mechanics.

What kind of game will we build?

In order to be the more inclusive as possible, we choose to restrict the gameplay to an interactive story game only.

Why?

Because everyone of us already enjoyed some storytelling materials, such as books, comic books or movies. And as interactive storytelling games share a lot of the same principles, each of us already knows a bit of its codification. If everything goes well, no one would be left behind during the creation process.

Narrative concepts

As we will use this project to build our own interactive stories, it may be useful to define and describe some narrative elements we could use.

This project uses narrative concepts from movies, theater play and video games.

Frame

In this project, a frame will have its cinematographic meaning.

Cinematographically in movies or video games, a frame represents the world output of a camera at time T.

Another frame should be created as soon as we, as directors, would like to output changes.

Whereas for this project we can totally omit cinematographic frame informations (as the camera movements), if we still want to add some of those in our story, we could try to focus on only two of them :

World background / film set

What elements are shot by the camera.

Shooting scales / plans

What is the scale of the main subject shot by camera ?

Example 1

From top of a cell tower in the desert, we can see the city and mountains behind.

World background : Desert, city and mountains

Subject : City

Shooting scale : Large, Landscape.

Angle of shot : $\sim 5^\circ$ at $\sim 30\text{m}$ high, at top of cell tower.

Intentions : ?

Example 2

The left eye of Malika covers 50% of the frame, showing its wetness sparkling.

World background : ?

Subject : Malika / Left eye of Malika

Shooting scale : Close up, Extra Close up

Angle of shot : ?

Intentions : Insist on Malika emotions.

Dialogs, Actions, and Mechanics

Dialogs, Actions and Mechanics in this project can be used to feed contents into our frames.

Dialogs will really act as dialogs in theater scripts or screenplays :

Daniela : “Hi everyone, Im Daniela!”

Crowd all together : “Hello Daniela”

Unlike actions in movies, in this project Actions will provide available actions or choices the player/reader can take during a specific frame or even during dialogs.

d12. Daniela : “Hi Luis, nice to meet you!”

d12.a **Action A : Act politely (-> d13.a)**

d12.b **Action B : Be honest (-> d13.b)**

d13.a You : “Nice to meet you too Daniela”

d13.b You : “Don’t you recall me? We make out last week! It hurts.”

And just like in video games, our frames can be feed with player interactions and game mechanics:

d23. **Daniela** : “Before I leave, can I get back the book I lend you?”

d24. You : “Ho... heu. Yeah for sure.”

d25. You : “I come back in 1 minute.”

m11. **You will have 1 minute to drag and drop every piece of mess in your room in order to find Daniela’s book.**

Sequence

In this project, a sequence will have its cinematographic meaning.

Cinematographically in movies, a sequence is a series of narrative contents put together. They can contain multiple smaller Narrative content such as **frame, dialogs, actions & mechanics**.

Cinematographically in video games, a sequence fully inherits its movie meaning plus interactions and gameplay contents.

At the end, movies or video games can be structurally reduced as being a serie of successive sequences.

We will use the same concept. We will build our story by focusing on sequences one after another.

A sequence is usually delimited by a location or a time change in the story.

Narrative Structure

As we will build a story, we need to be aware of existing narrative structures, their specificities and their pros & cons.

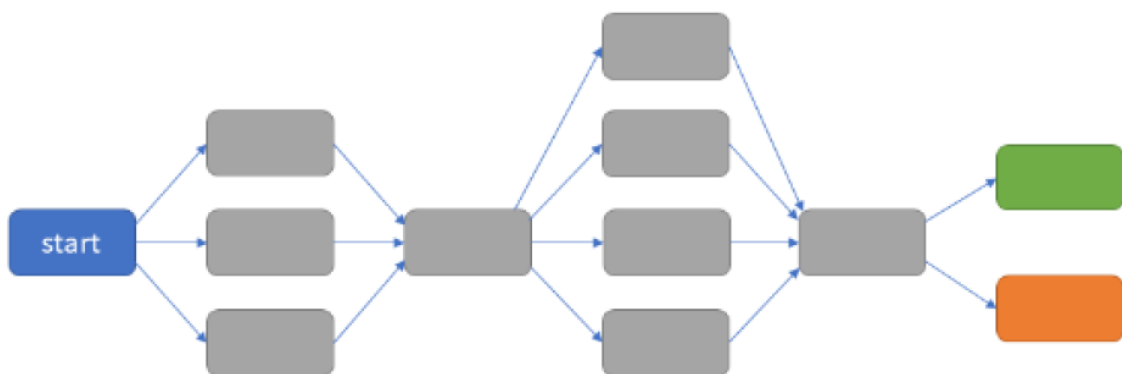
As we will be building one, we categorized them as :

- Possibilities : How many possibilities a player will have
- Replayability : Ability to replay the story and follow a different path
- Complexity : Complexity to build

This project is built to enable and ease the “Branch & Bottleneck” narrative structure but you can optionally learn more narrative structures :

<https://heterogenoustasks.wordpress.com/2015/01/26/standard-patterns-in-choice-based-games/>

Branch & Bottlenecks



This kind of non-linear structure allows the reader and player to make its own path through a narrative story.

What is important to remember with “Branch & Bottleneck” structure is that : **“Deviations (branches) can occur, BUT, the story must start back from the main trunk (bottleneck) after”**.

Practically in our stories, we will be able to deviate INSIDE a Sequence, but at each end of that Sequence, **we will always go to the next Sequence**.

Game Mechanics

As this project aims to enable students to build their own interactive story, we need to have a set of available game mechanics.

The following set of provided game mechanics acts as a base to articulate the story around. They will morph a linear narration into another more complex narrative structure.

The provided set of game mechanics can be extended by your own game mechanics. Additional game mechanics must always be articulated around the story.

Items

Players will be able to collect and use items.

Item collection can be intentional or not.

Item collection can be explicitly shown or not.

Using collected items can be intentional or not.

Using collected items can be explicitly shown or not.

RNG - Random Number Generator

Random numbers can be generated in order to act as probabilities.

Conditions

Narrative structure can use conditions in order to provide branches on the narrative structure.

Item condition

Conditions made on collected items.

Player has collected (at least one) itemA

Player has collected (at least) 3 itemA

Player has collected (at least one) itemA and (at least one) itemB

Player has collected (at least) 2 itemA and (at least) 5 itemB

RNG Condition

Condition made on random generated numbers. Number generation can also take collected items into account.

80% chance to succeed

2% chance to succeed

Player has asMuch% chance to succeed as he/she collected itemA

Quick time event

Some parts of the interactive story can be time restricted. This is known as quick time event. This mechanic usually appears during choices or interactions.

Player will have 3 seconds to choose between answerA and answerB.

Player will have 30 seconds to click on as many itemA he/she can find in the current frame.

Mouse / Pointer interactions

We won't especially need this mechanic in order to build an interactive story, but they are available we want to add more gameplay into.

Player will have to click/tap each itemA in the displayed frame

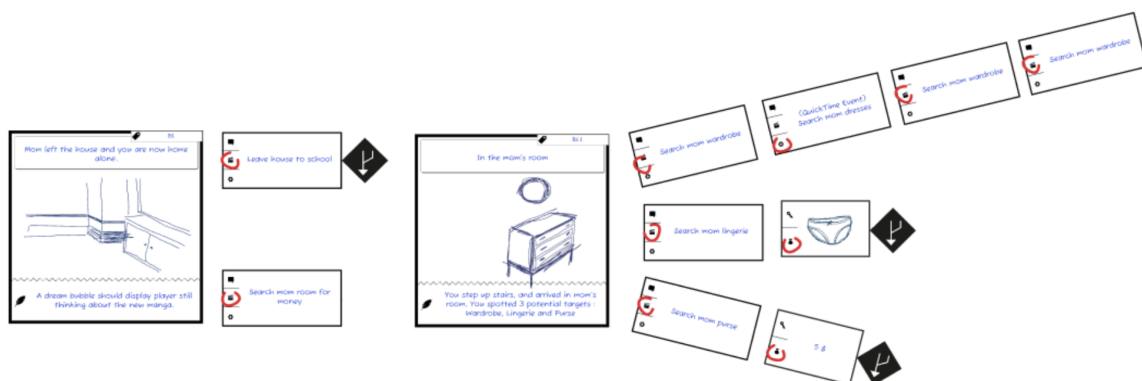
Player will have to scroll down

Player will have to drag itemA over ItemB in the displayed frame

Player will have to click/tap as much as possible in the displayed frame

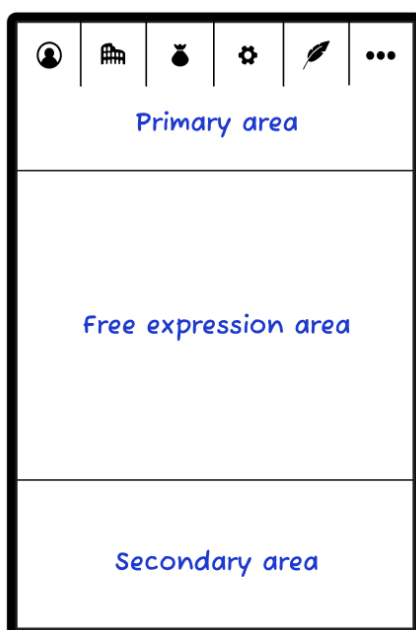
Material

This project comes with its own physical material to print. Let's review it.



The material also provides a cloud version, which is hosted on figma. While the cloud version might seem to be a better choice, actually in practice, the physical version offers a faster setup and really eases collaboration of students inside a classroom.

Description Cards



We must use description cards to define collectible items. What they are, what they mean, and what are their consequences. Collectibles are used to reward "positively" or "negatively" the player during the narration.

Description cards are also useful to describe everything we want for your story. We can describe characters, locations, situations, music, and every other thing the way we want to be transcribed in our story.

We can find examples of Description cards used as :

- Collectibles in the end section of the demo story
- Descriptions in the setup section of the demo story

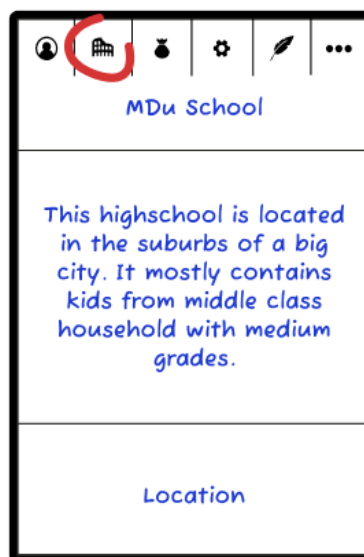
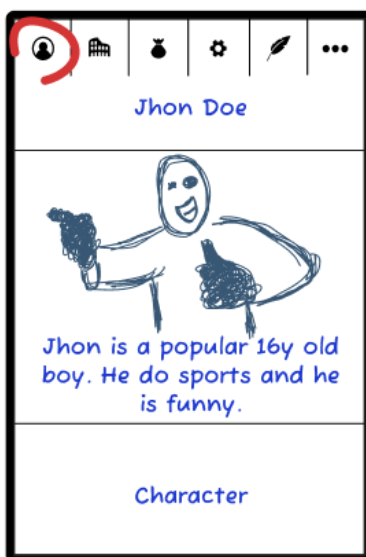
Blueprint of a description card

Primary area: This area should be used as a title section of the card. Give the collectible, location, character or anything else a comprehensive or unique name.

Free expression area: This area is where we can express ourself. We can use or mix drawings, collages or just sentences to illustrate of we want our item to be illustrated in our story. **No one expects beautiful nor neat graphics, just the minima to illustrate the element.**

Drawings don't need to be neat nor beautiful. Their single purpose is to offer an idea of a representation we agree on.

Secondary area: For collectible, we should use this area to describe consequences of the item we have collected. Otherwise this area can be used to define the type of the concept we describe; Character, Location, Sound Ambient, etc...

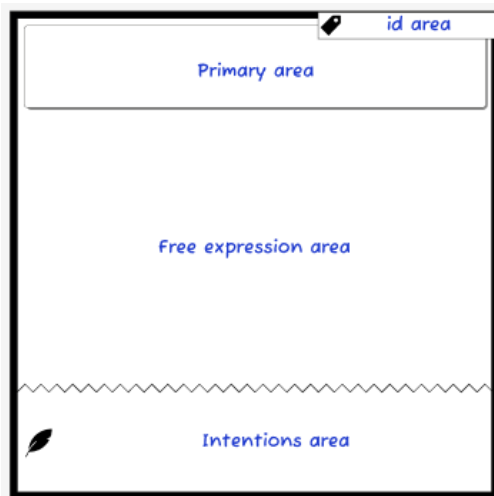


Examples for description use

Examples for collectible use



Frame Cards



Frame cards are useful to illustrate our cinematographic intentions of a particular instant of our story, as we defined them in Narrative Content - Frame.

In this designing material they are represented just like comic book frames.

Frames can be used to illustrate narrative sequences.
Frames can be used to illustrate interactive sequences.
Frames can be defined as still or animated.

We can find a lot of examples of frame cards everywhere in the demo story.

Blueprint of a description card

id area: (Optional) This area can be used to tag a specific frame with a unique identifier : ie : "A1.Q1C2", "First Frame", "The meeting point", etc... Identifiers can then be used to provide additional content to be shared with this particular frame.

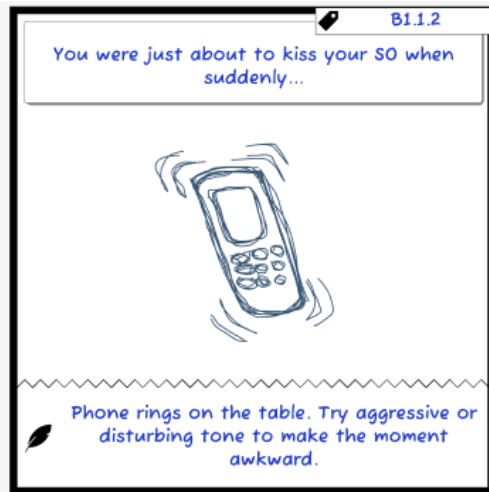
Primary area: (Optional) This area can be used as a narrator, voice over or contextual introduction of the frame.

Free expression area *: This area is where we can express ourself. We can use or mix drawings, collages or just sentences to illustrate what should be displayed in a frame.

Drawings don't need to be neat nor beautiful. Their single purpose is to offer an idea of a cinematographic frame representation we agree on.

* If we filled up Primary and Intentions areas we therefore aren't entitled to fill it.

Intentions area: (Optional) We can use this area to insist on what and how things should be illustrated.



Example frame A



Example frame B

Content Cards



As their name said, content cards will contain each piece of content of our narrative and interactive story we built.

Content can be used to relate passive dialogs.

Content can be used to offer choices. (Actions/Active dialogs)

Content can be used to relate interactive or game mechanics.

Blueprint of a description card

Actions, Choices and Active dialogs might have consequences. And the first one is : Others choices may become unavailable as soon as another choice has been selected.

Type selector area: We must emphasize the selected type we want for each piece of our contents.

Content area: English* sentences to relate our content.

**Please note that we are recommending building your story using english sentences in order to ease the further submission step, which requires english content. If you feel better in your own language, use it on the material during the building phase of your stories. You will then have to translate only stories you want to submit.*

To emphasize the type of a content card we must **Surround** the selected type.

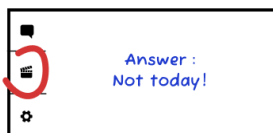
Example dialog content



This content card is read as :

- a **dialog**
- said by **Coach**
- **“Hey! Wake up!”**

Example action content

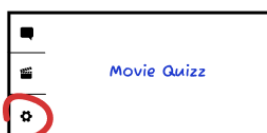


The player will have the **choice** to answer **Not today** on the current dialog phase.



The player will have the **choice** to talk to **Maria** in the current sequence.

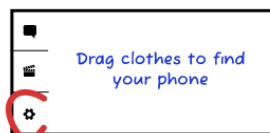
Example mechanic content



The player will have to play a movie quiz.



A game mechanic of QTE with 5 seconds duration will happen.



Player will have to play a minigame where he needs to move clothes in order to find its phone.

Token Cards



Token cards are the way to insert Collectibles in the story

Token can be used to reward collectibles that the player will then own.
Token can be used to condition parts of story according to collectible currently owned by the player.

Blueprint of a token card

Type selector area: We must emphasize the selected type we want for each piece of our tokens.

Collectible: Drawing or id representing a described collectible.

To emphasize the type of a token card we can follow emphasis rules of content cards:
Surround - Strike out - Fold out - Fade out

Example mechanic content



The player will be rewarded with itemA

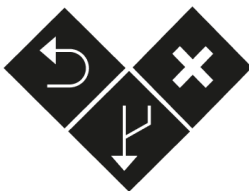


A condition using item. Succeed if player have collected (at least one time) the itemA



A condition using item. Succeed if player have collected (at least 3 times) the itemA

Directional nodes



Directional nodes are indications on how to navigate after the current material.



U-Turn: go back to the first frame placed at left.



Advance: Advance to next Sequence.



Dead-end: The story is over. Let's head up to Recap.

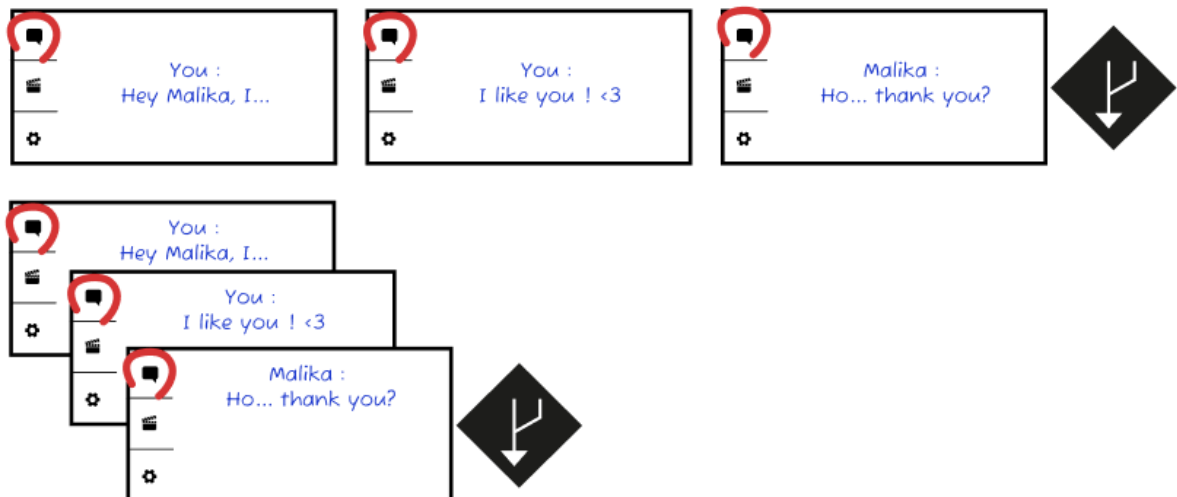
Example directional nodes



Content Stacking

We have seen that Go right can be omitted, but also Go right can of the same material type can be stacked.

This will reduce the horizontal space of a Sequence.



Stacking is optional and can be performed on both paper and cloud versions.

Board - Table layout

The last required material is a board in order to position successive cards to form our narrative story.

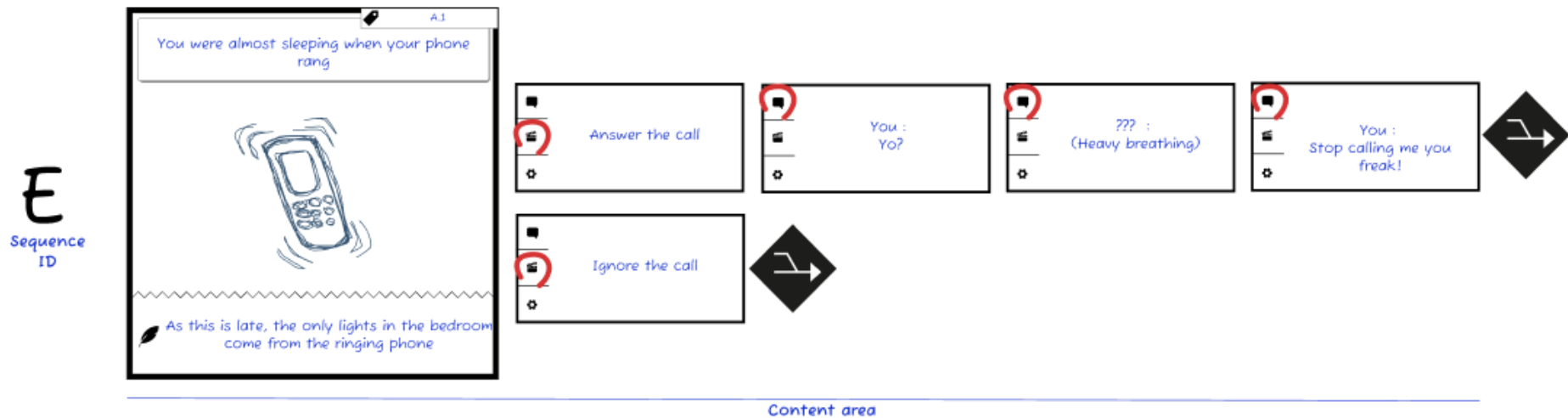
To be a bit more accurate, it is unlikely that the board will contain the whole story at once. Board will more likely contain Sequences, one after another.

Pro tip: When possible, try to keep the previous Sequence displayed on the board. It will ease its connections with the current Sequence.

The recommended orientation for the board is landscape, and recommended size is 100x200cm.

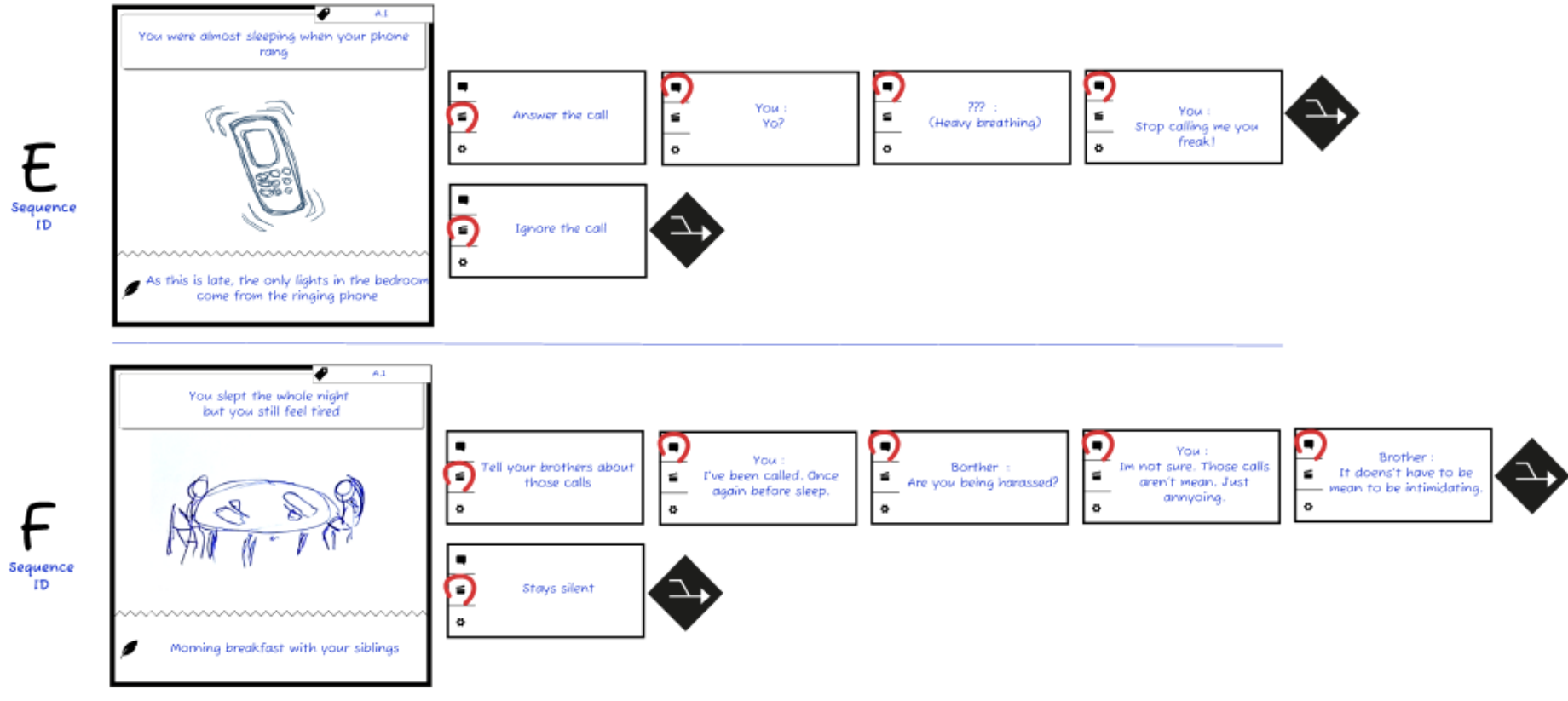
Layouting a Sequence on the board

Sequence ID: The name of this Sequence. It will be useful when we will need to provide additional information on a specific Sequence. Content area: All the material that forms that Sequence.



Layouting multiple Sequences on the board

If we are able to display multiple Sequences on the board, the succession of Sequence is vertically represented.



Building a story

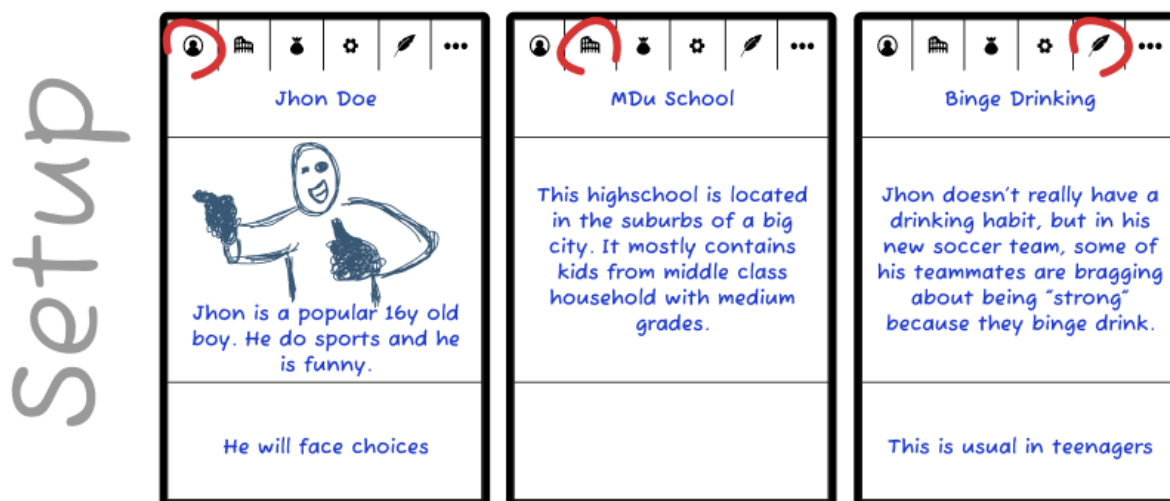
In order to build a story, we will go through 3 main phases.

They are listed chronologically

Phase 1 : Setup

We would need to create and then place on the board Descriptive Cards in order to be able to provide a quick synopsis of the story we will try to built.

Example of Phase 1 : Setup



This kind of setup is enough. It defines the main protagonists, main location where the story will happen and the main situation we want to relate in our story.

Pro tip: We should try to always keep Setup displayed on board. It will help us to evaluate how much we digress and for how long. It will then allow us to get back on rails.

Example of guiding questions to help you define the characteristics of a character:

- *Is this character the main one?*
- *How old is he/she?*
- *Does he/she have a job?*
- *Does he/she have a family? Composed by who?*
- *Which kind of personality he/she possess?*
- *Does he/she have super powers?*
- *Does he/she have a disability?*
- *What are his/her passions?*
- *What are his/her fears?*

Of course, students are not forced to define all these points. These are just to help in building the characters and, therefore, the story.

Phase 2 : Sequences

Let's build the current sequence with any available material.

This phase will be repeated as much as we need to sequence our narrative story.

When finishing a sequence, it might be great to take one or two pictures of its layout on the board. It will help you during refining steps.

Reminder : A new sequence can (should) be created as soon as location, action, or time change.

Phase 3 : Recap

Once the story and all its paths are built and reviewed, we can place on the board any collectible.

They will act as recapitulation of what choices have been done by the player and their consequences in the story or in real life.

Example of Phase 3 : Recap



Phase 4 : Fine tuning (optional)

Some built stories or sequences might require some additional fine tuning in order to match what the group wants to achieve.

At any time, an existing sequence can be loaded on board in order to be improved.

How to use in classroom

Whereas we are providing different propositions to use this material in order to build interactive stories, this is important to note the following :

The following propositions are not magical formulas. Each group will have its own dynamics. In the end, teachers know their students better than anyone. Therefore, we trust them to refine, deviate, manipulate and hack our propositions on how each group could use the material.

Feel free to share your results with us.

Small groups

This is our recommended way to use the material.

Group classroom tables 4 by 4 in order to provide a bigger surface.

Dispatch 4-7 students per surface.

Each surface must have its own printed material.

Let each group build their stories naturally.

This way can also be used to decompose a bigger story. Using animated class groups, you could define big pictures, and which sequences would have to be covered. Then dispatch the building of sequences to groups.

Animated class group

This is our recommended way to introduce the material.

Classic classroom interaction : Teacher animates and moderates the building of the story with the complete student group :

- Setup :
 - Teacher : What will we narrate? What will happen?
- Sequence :
 - Where does this sequence start? Which protagonists in that sequence? What choices will be offered with which consequences ?

It can be done on board, with magnets.

Some hints of alternative material uses

You can mix up any of the propositions with some common board game mechanics. Feel free to try mechanics you know and like. Here is a very limited glance.

Board game mechanics : Turn by turn

You can define a direction of rotation, and each participant will have to make one action before passing the turn to the next participant.

Actions can complete existing content: Increase description of a location, add a description or intents to choice, add a sound fx to a dialog, add a sound ambiance to a frame...

Actions can add new content: Add a new frame, add a new dialog, add a new choice, ...

Actions cannot change or redefine existing content

Board game mechanics : Dealing cards

Distribute the material per student just as we would do with a card game.

It can increase the participation of each student, more shy students will have a minimal number of actions to do, whereas more productive or extroverted students will have a maximal number of actions to do.

Additional goals

Involve everyone

This is not a proposition, but we know that each student is unique, and not participating the way we expect, doesn't mean not being involved at all. Building a story can use a lot of additional elements we don't require, but we are eager to receive : Graphics, Drawing, Collage, Video, Pictures, Audio, etc... So teachers can decide to not force a student to participate the way we intended.

Let cooperate

As a complete story can be long to obtain, you can split a story into sequences, and dispatch them in different groups or even classes. It may enable more cooperation between each involved groups or classes in a bigger picture story.