

Murder Mystery Incorporated



Game Design Document

Anthony Baiamonte, Developer

Christian Colombo, Developer

Emanuele Grandi, Artist

Matteo Mangioni, Game Designer & Developer

Mauro Brochier, Developer

Table of contents

1. Overview and vision statement
2. Gameplay
 - 2.1 Planning phase
 - 2.1.1 Map
 - 2.1.2 Timeline and actions
 - 2.1.3 Items
 - 2.1.4 Guests
 - 2.2 Execution phase
 - 2.2.1 Action execution
 - 2.2.2 Suspicion and winning
 - 2.3 Progression
3. Content
 - 3.1 Verbs list
 - 3.2 Items list
 - 3.2.1 Item categories
 - 3.2.2 Item descriptors
 - 3.3 Guests list
 - 3.3.1 Guest base behaviour
 - 3.3.2 Guest descriptors
4. Levels
 - 4.1 Tutorial 1
 - 4.2 Tutorial 2
 - 4.3 Tutorial 3
 - 4.4 The Dinner
 - 4.5 The Wedding
5. Media list
 - 5.1 Aesthetics
 - 5.2 Required assets
6. Technical specification

1. Overview and vision statement

Murder Mystery Incorporated is a 2D puzzle game for PC and browser where the player takes on the role of a rookie member of the strange titular intelligence agency tasked with orchestrating the perfect murders through a series of levels.

The game aims at creating an *intriguing and intellectually-gratifying experience* that will make the player feel smart by asking them to carefully craft a plan for a murder and then watch it in action, adjusting it as needed. The target audience are mid-experienced players aged 18-30.

Each level will present the player with a stylized setting (eg. a house), a list of guests and a target among them: the goal is to make sure that the target dies without raising too much suspicion by *planning a series of actions on a timeline* that will be performed by the player's agents during the plan's execution. The player will also be able to place a series of useful items inside the map to aid with the plan.

Once the player is satisfied with their plan, they'll hit play and watch it unfold: the different guests will enter the map and will start interacting among them, with the environment and with the player's agents according to their AI. If the player has managed to plan around them, luring the victim to the right place and killing it without arising too much suspicion, they win! Otherwise, they go right back to modifying their plan to give it another go, in a seamless *trial-and-error* cycle.

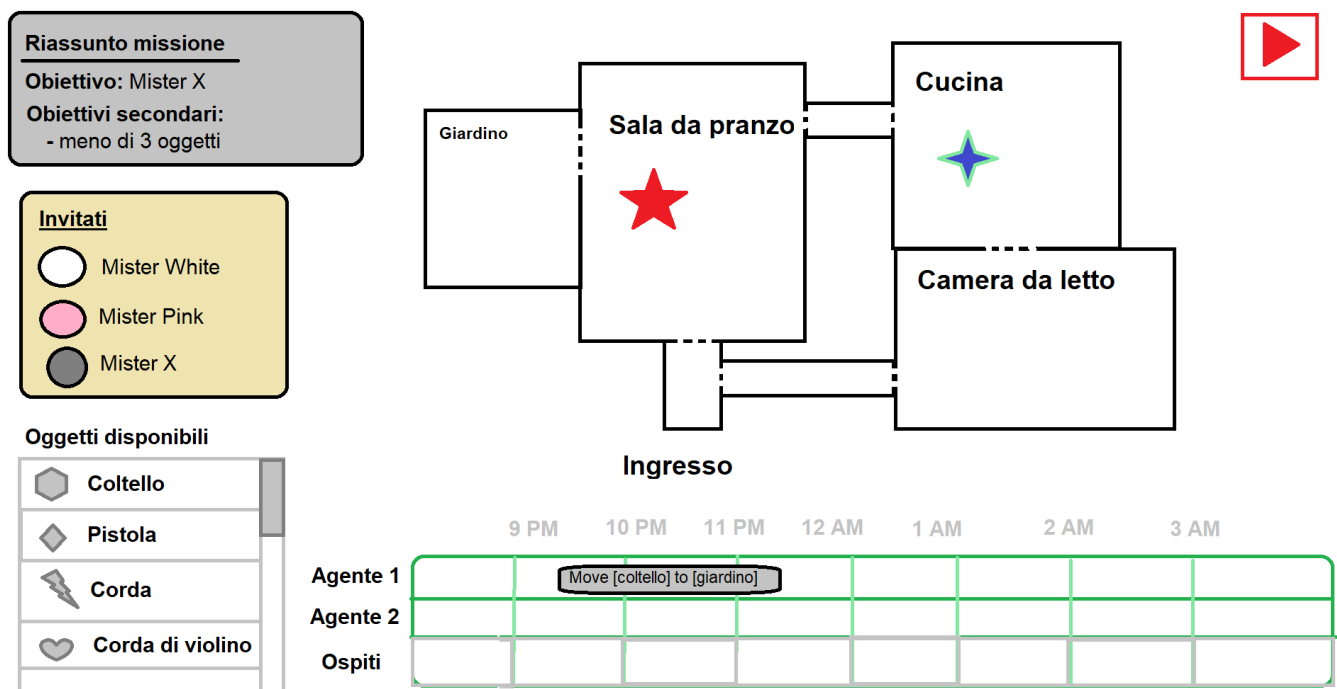
Despite the grim theme, the overall tone of the game is quite *humorous and light*: guests are exaggerated depictions of different archetypes, from the stealthy ninja to the loud cowboy, and the music and art style help make the game funny.

2. Gameplay

Gameplay is divided in two distinct phases: a **planning phase** where the player is asked to craft a plan for their murder and an **execution phase** where the player watches said plan unfold.

2.1. Planning phase

During this phase the player will need to examine the map, the guests and the available items and actions to come up with a plan for killing their target without raising too much suspicion. A series of optional objectives will also be presented to the player as a way to improve their score and guide their plan towards a certain configuration.



The picture above shows a mockup of how the planning phase should look like. A part from the **objectives list** and the **play button** that allows the player to transition to the execution phase, the following paragraphs break down the systems in greater detail.

2.1.1. Map

At the center, a schematic top-down representation of the **map** is *divided in different areas which act as single spaces* for all game purposes, meaning they aren't further divided in cells: this helps maintain the structure of the map easy and immediately understandable, removing unnecessary granularity.

Under the hood, the Map is a *graph of interconnected nodes representing areas/rooms*: each of these nodes needs to contain a list of the people (Agents and Guests) and items present in them. *Two entities can interact with one another if and only if they are in the same node*: for example, a guest will only see an item once they are in the same room as it, and an Agent will only be able to kill a Guest if they are in the same area. However, since there is no further subdivision, as soon as two entities are in the same area they can start interacting right away: guests will immediately notice a corpse in their room, for example, even though graphically it may be on the opposite side of it.

2.1.2. Timeline and actions

Below the map, a **timeline** allows the player to plan a series of **actions** to be taken by their agents, each in their own row. These are divided in a sequence of **slots**, with each action occupying either 1, 2 or 3 slots: as detailed in the paragraph on the [execution phase](#) time will proceed slot by slot, so all actions in a slot will be concluded before passing to the next slot.

An additional row for Guests in the timeline shows *predefined events that will involve guests*, which will happen in specific slots and allow the player to plan around them. These will depend on the level and will dictate the actions of all guests.

The actions agents can be instructed to do are modular in nature, being made of a **verb** and a series of *complements* that depend on the verb itself: the "Kill" verb, for example, will require a person to kill and a weapon to do so, whereas the "Give" verb will require an item and a guest to give it to.

An important specification is that actions will always **automatically include movement**: if told to drop some item in a room, for example, an agent will first move into the room and then drop the item. This will mean that agents move sporadically throughout the map but will also allow a more high-level planning for the player.

Another important concept is the one of **agent inventory**: each agent will be able to pick up items during the plan which will be stored in its inventory. Each Agent can only have *one item at a time* on them: the timeline will therefore need to take into account which items the Agent currently has when determining what actions they can take.

See [verbs](#) for an updated list of possible action verbs. Each level will make only certain verbs available to the player, which will therefore need to plan only using them.

2.1.3. Items

On the left of the timeline, a list of **items** is shown, whose availability also depends on the level. These items can be placed inside the different areas of the map to be interacted with by agents and/or guests during the execution phase by drag-and-drop.

Each item will have:

- a **category**: determines how the item will be used by the Agents and Guests (eg. "weapon");
- a list of **descriptors**: a series of modifiers that will change actions involving the item (eg. a "slow" "weapon" may add 1 slot of time to the "Kill" action).

See [items](#) for an updated list of possible items, categories and descriptors. Similarly to verbs, each level will make only certain items available to the player.

2.1.4. Guests

The last piece of information provided to the player is a list of the **guests** that will be present in the current level.

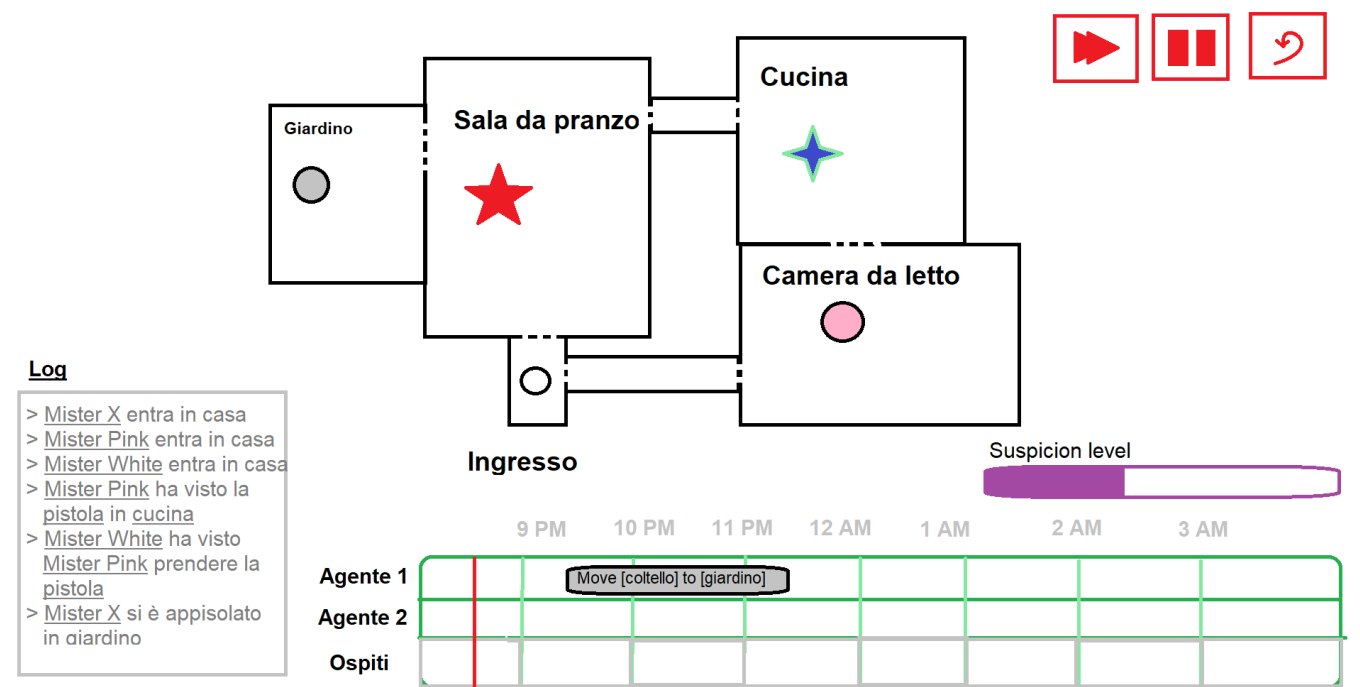
All guests share the same basic AI, whose functioning will be explained in the [guests](#) section: however, along with a name and a unique icon, each guest also has a series of **descriptors** that will modify this base behaviour; a "brave" guest could rush to the scene of the crime, while a "cowardly" one will probably steer clear from it. These descriptors are given in order to allow the player to imagine how guests will behave and react to different events.

As mentioned before, guests will also share some **guest events**: these are activities that will be placed in the timeline beforehand and that will make guests perform certain actions. The exact meaning of these events will be left for the player to imagine, but not all events will interest all guests based on the given context: in the Wedding level, for example (see below), the "Wedding" event won't interest the Chef which will instead continue working while the other guests attend the ceremony.

Guest AI is *completely deterministic*: each guest will always act and react the same way when subjected to the same events and situations. This allows the player to properly plan and avoids the frustration of having a good plan and just waiting for a good run where it works.

2.2. Execution phase

During the execution phase, the player watches their plan in action. Here, the top-down map is replaced by a more complex and colorful false-isometric one, allowing the player to better examine the action.



2.2.1. Action execution

During the execution phase, **time progresses by steps**. Each step, the following will happen all at once:

- Agents perform their action (if any) for the step, or continue a multi-step action started previously;
- All Guests have a chance to perform an action according to their AI, or continue a multi-step action started previously.

This will result in the guests and agent characters roaming the map and interacting with each other and with the items according, respectively, to their AI and to the actions planned by the player. In particular, by default *each guest listens for and reacts to all events that happen in the map area they're in* (eg. room in an house): how they act or react is determined by their descriptors. On the other hand, agents don't act on their own and only execute the actions planned by the player.

Each action taken by either Agents or Guests is reported in the **log**, aiding the player in keeping track of how their plan is going. A few buttons in the top left help the player stop time to examine the situation, speed it up and return to the planning phase.

2.2.2. Suspicion and winning

During the plan's execution, the player agents' actions contribute to a **suspicion bar**, which shows the suspicion level felt by the guests: if the player is not careful, they may catch up to what's going on. All in all, the suspicion level can be influenced by:

- **Guests seeing certain agents' actions** (eg. seeing an agent walk around with a weapon or exit the room where a dead body is then found);
- **Guests seeing certain items in their room** (eg. if a guest walks in on another guest's corpse).

Each of these events will generate an integer number of **suspicion points**: if the *total suspicion level reaches 10 points, the player loses* and must go back to planning. The player wins if instead:

- the timeline reaches its end;
- only target is dead;
- the suspicion level is below 10.

No specific resolution is intended for each level, allowing the players to fully express themselves through their plan.

2.3. Progression

The game is divided in a series of levels of increasing difficulty: a total of 5 levels have been planned for the beta release and their details can be found in the [levels list](#). Each level differs from the others by the following parameters:

- different map;
- different guests with different traits;
- different availability of action verbs and items.

This structure allows for the first levels having just a few verbs and guests, therefore easing the player into the systems and mechanics. Later levels then expand on this, creating increasingly complex scenarios that require more deep and nuanced planning.

3. Content

This section contains all planned contents of the game, each categorized in a table containing all its details.





3.1. Verbs list


All verbs in this section are associated with their list of required complements, a description detailing what they do, their duration in slots and a base suspicion level on a scale of 1 to 10.

Name	Complements	Description	Slots	Suspicion
Take	Item	Agent moves to the room where the item is and picks it up, adding it to its inventory.	1	If Weapon: 2 points.
Drop	Item, Room	Agent moves to the specified room and drops the selected item from its inventory.	1	If Weapon: 2 points.
Kill	Guest, Item (Weapon)	Agent moves to the location of the guest and uses the selected weapon on them.	1	10 points
Talk	Guest	Agent moves to the location of the guest and stops them for a chat to reduce the suspicion level by 2 points	1	0 points
Clean	Room	Agent moves to the room and cleans it from any blood	2	1 point

3.2. Items list

The items in this list are each associated with a category and a series of descriptors that can be found in the following paragraph: in tandem, these determine how the item is used.

Name	Category	Descriptors	Appearance
Gun	Weapon	Loud	
Knife	Weapon	Slow	
Cleaver	Weapon	Guarded	
Cash	Lure		

Name	Category	Descriptors	Appearance
Wine	Lure	Guarded	

3.2.1. Item categories

Category	Description
Weapon	Can be used to kill guests and arieses suspicion when handled.
Lure	Can be used to lure guests in specific rooms and keep them there.
Corpse	When they die, Guests become Items of the Corpse category.

3.2.2. Item descriptors

Name	Description
Loud	Using this item will alert guests in neighbouring rooms, adding 2 suspicion points per guest alerted.
Slow	Using this item will add 1 slot of duration to the action.
Guarded	Being seen taking this item will result in immediate failure.

3.3. Guests list

This table shows the different guests that can appear in the levels, complete with their descriptors. The following paragraphs instead explain how guests work and how their behaviour is changed by different descriptors.

Name	Descriptors	Appearance
Robot Dummy 1		
Robot Dummy 2		
Robot Dummy 3	Greedy	

Name	Descriptors	Appearance
Detective	Suspicious	
Femme Fatal		
Businessman	Greedy	
Priest	Greedy	
Bride	Alcoholic	
Groom		
Best Man		
Father in Law		
Chef		

3.3.1. Guest base behaviour

All guests have the same behaviour, which is modified **ONLY** by descriptors. Conditions and tasks are deferred to a "Guest class" to evaluate.

- *{selector}*
 - *{condition}* If there is a Lure for the guest in the room, *{task}* **take the lure** [1 slot].
 - *{condition}* If there is a Lure for this Guest in a neighbouring room, *{task}* **move to the room with the Lure** [1 slot].
 - *{condition}* If there is an event in the Guest timeline, *{task}* **execute the event** [1 slot].
 - Otherwise, *{task}* **wander**:
 - Look at neighbouring rooms and evaluate their *interest score*: each Room has a base interest score that Guests descriptors can modify.
 - Move to most interesting room.
- *{condition}* If there is a Corpse in the current room, *{task}* add 4 suspicion points.
- *{condition}* If there is a Blood in the current room, *{task}* add 2 suspicion points.
- *{condition}* If there is an Agent with a Weapon equipped in the current room, *{task}* add 2 suspicion points.

3.3.2. Guest descriptors

Descriptors are decorators of a base class for Guests that modify their behaviour on the different tasks required by the behaviour tree.

Name	Description
Suspicious	This guest has a keen eye for details. Whenever they see a suspicious action, add 2 extra points of suspicion.
Greedy	This guest wants to get its fingers on anything precious. Cash is considered a Lure for them.
Alcoholic	This guest can't resist a little alcohol. Wine is considered a Lure for them, but only if they can take it without anyone seeing them.

4. Levels

This is the list of levels that will be included in the game:

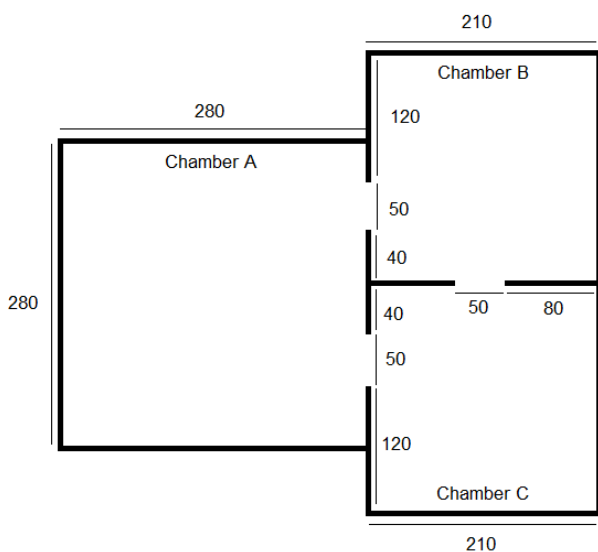
Level	Agents	Guests	Available verbs	Available items
Tutorial 1	1	Robot Dummy 1	Take, Drop, Talk, Kill, Clean	Gun
Tutorial 2	1	Robot Dummy 1, Robot Dummy 2	Take, Drop, Talk, Kill, Clean	Gun
Tutorial 3	1	Robot Dummy 1, Robot Dummy 2, Robot Dummy 3	Take, Drop, Talk, Kill, Clean	Gun,Cash
The Dinner	1	Detective, Femme fatal, Businessman	Take, Drop, Talk, Kill, Clean	Gun, Knife, Cash
The Wedding	1	Priest, Bride, Groom, Best Man, Father in Law, Chef	Take, Drop, Talk, Kill, Clean	Clever, Holy Wine, Cash, Cash

4.1. Tutorial 1

Teaching goals

- Objective of the game
- Planning and execution phase
- How guests and agents work
- Suspicion points

Level setup



Dimensions are given in pixels.
Walls are 10px wide.

"Isometric walls" can be added but:

- Must be 25px wide;
- Can be placed only on the outside (eg. not on the top side of the Study in Level1) so there's no need to add corridors.

Room decorations must be limited to the walls and/or pavement element (eg. carpets) that won't look wrong if stepped on by characters (eg. no tables).

Floor patterns and colors must look natural and coherent between rooms. They also need to have space to accommodate the room's name in the given position. The text will be black, so the color and pattern of the floor must look good with that.

Room decoration ideas:

- Chamber A, B, C : these are all test chambers like the ones from Portal 1&2. The ambient should be clean and cold like an operating room.

- **Map:** the map is basically a bunch of test chambers used to train new agents (*think Portal 1 & 2*)

- **Guests:** only 1 guest, which is a Robot Dummy (*the idea is that they use them for training in place of real people*)
 - Robot Dummy stats:
 - *Descriptors:* none
 - *Interest levels:* Chamber A = 1, Chamber B = 2, Chamber C = 3
- **Agents:** only 1 agent
- **Items:**
 - Gun, already placed in map in Chamber B
- **Timeline:** 4 slots from 14:30 to 16:00, already populated in the following way:

14:30	15:00	15:30	16:00
Agent	Take Gun		Kill Robot Dummy with Gun

- **Notes:** in this level the Guest and Objects lists are not shown.

Script

Agatha appears at the center of the screen and starts talking with a text bubble. The background is heavily obscured.

Agatha: "Hello there, you must be the new employee. Welcome to Murder Mystery Incorporated! I'm **Agatha Doyle** (*how ironic, I know*) and I'll be your teacher for the next few days: I'll help you get familiar with what we do here."

Agatha: "So, as you know, our organization is a quite odd one. Our clientele has someone they want... 'taken care of', but they don't want the hassle of coming up with a plan to do it themselves (*our lawyer has suggested we don't admit to k****ing people too frequently*)."

Agatha: "And that's were we, or better *you*, come in: your job is to **organize the perfect murder** for our agents to execute. The client will find a way to invite the target to the place, you have to make sure that they never leave it: all **without arising too much suspicion**, of course."

Agatha leaves the center of the screen and the background clears up. Now the whole screen is visible. Agatha reappears in a corner.

Agatha: "Now, let's get our hands dirty: these you see here are the tools and systems you'll have available for preparing the plan. Don't worry if some sections are hidden right now, we'll talk about them some other time."

The objective panel is highlighted.

Agatha: "Here at the top you will see your **target**, the person you need to 'unalive' before the time runs out and the guests leave. In this test we'll use one of our *Robot dummies*: don't worry, they're 100% cruelty-free (*unlike some other things...*)."

The timeline is highlighted.

Agatha: "The **timeline** down here is where you'll actually design the plan: it is divided in a series of **slots** which can contain actions that tell our agents what to do. I've already filled it for you this time, but take a moment to look it over."

The start button is highlighted.

Agatha: "For now there isn't much else to say about preparation, so how about we give this plan a try? Click the **Start** button and we'll see it in action!"

When the player starts the execution phase, the game is immediately halted and Agatha appears again.

Agatha: "Here we are in the most thrilling moment, the plan's execution! No room for error here: we have to leave it to our agents to carry out the actions we prepared and hope we did everything right. Fortunately, our world is governed by some very strict rules that can help us understand what will go on during this phase."

Agatha: "First of all, **each timeline slot is completed in its entirety before passing on to the next**. Notice how the first slot has turned yellow: this means that it is currently in progress and each person on the map will have a chance to act before the next slot is executed."

Agatha: "The second important thing is that **our agents will always go first** followed by **all guests at the same time**. Moreover, guests will always act and react the same way in every execution: keep this in mind when designing your plans. Now, close this dialogue and watch as the plan unfolds!"

The game is started and we watch as the plan executes. We stop at the end of the second slot and Agatha reappears.

Agatha: "Did you see what happened? Our agent moved to pick up the **Gun** from the ground: then, as soon as the guest walked in on them holding the weapon they got suspicious (*and who could blame them?*)."

The suspicion bar is highlighted.

Agatha: "This is an example of the situations that generate what we call **suspicion points**, a measure of how much the guests as a whole suspect something strange is going on. As you can see, these points were added to a bar: as soon as you hit a total of 10 suspicion points you'll be **busted** and will have to start over, so watch out for potentially suspicious scenarios!"

The game resumes and we watch the plan unfold and finish. After the win panel has been shown Agatha appears again.

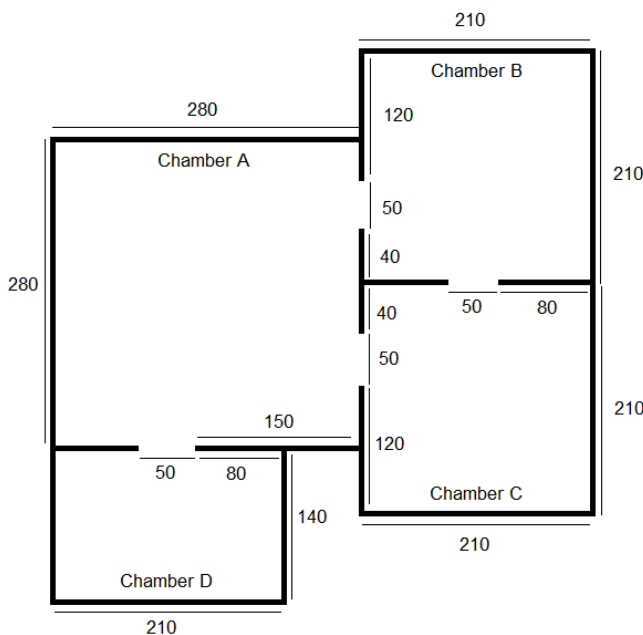
Agatha: "We did it! Follow me in the next tutorial where we'll learn how to **create actions** and the different types of actions available for our agents."

4.2. Tutorial 2

Teaching goals

- How actions are created
- Types of actions
- Multi-slot actions

Level setup



Dimensions are given in pixels.
Walls are 10px wide.

"Isometric walls" can be added but:

- Must be 25px wide;
- Can be placed only on the outside (eg. not on the top side of the Study in Level1) so there's no need to add corridors.

Room decorations must be limited to the walls and/or pavement element (eg. carpets) that won't look wrong if stepped on by characters (eg. no tables).

Floor patterns and colors must look natural and coherent between rooms. They also need to have space to accommodate the room's name in the given position. The text will be black, so the color and pattern of the floor must look good with that.

Room decoration ideas:

- Chamber A, B, C, D: these are all test chambers like the ones from Portal 1&2. The ambient should be clean and cold like an operating room.

- **Map:** same setting as before, only one more room
- **Guests:** 2 guests, Robot Dummy 1 & Robot Dummy 2
 - Robot Dummy 1 stats:
 - *Descriptors:* none
 - *Interest levels:* Chamber A = 2, Chamber B = 3, Chamber C = 4, Chamber D = 1
 - Robot Dummy 2 stats:
 - *Descriptors:* none
 - *Interest levels:* Chamber A = 1, Chamber B = 4, Chamber C = 3, Chamber D = 2
- **Agents:** only 1 agent
- **Items:**
 - Gun, already placed in map in Chamber B

- **Timeline:** 6 slots from 14:30 to 17:00, already populated in the following way:

14:30	15:00	15:30	16:00	16:30	17:00
Agent	Take Gun		Kill Robot Dummy 1 with Gun	Drop Gun in Chamber C	

- **Notes:** in this level the Objects list is not shown.

Script

Agatha appears on the screen as always.

Agatha: "Welcome back, fellow planner! As you can see, we've opened a new room and we also have **2 robot dummies** instead of one now: you can see their details in the **Guest list** we've added to the left of your UI. We tried asking for 3 but they're very expensive, believe me, and it doesn't help we have to brutally... *'put them out of commission'* each time."

Agatha: "The presence of an additional guest may complicate our planning quite a bit... Nevertheless, let's try running the same exact plan we've used before. Take your time to try to predict what will happen and then click the **Start** button."

When the player clicks Start, the game executes as normal. They will lose since Robot Dummy 2 will catch the agent killing Robot Dummy 1.

When the Game Over popup appears, so does Agatha.

Agatha: "Damn it, this is so unfortunate! We've been caught right in the act: this always results in a game over since it completely fills up the suspicion bar. Let's try going back and adapting our plan a bit."

The retry button is highlighted. Once pressed we continue and the Delete All button on the agent is highlighted.

Agatha: "Right now our design clearly doesn't work, so let's scrap it completely. Click on the **Delete All** button to clear the timeline."

After the button is pressed, Agatha continues.

Agatha: "Now that we have a blank slate, it's time for you to create a couple of actions in the timeline: don't worry, I'll guide you for now. Start by clicking on the **14:30 timeline slot**, right there where it says 'Click to create an action' (*I know you've been itching to do it, go on!*)."

The action creator popup appears.

Agatha: "As you can see, a popup appears to let you create the action in a modular way. First, you must select one of the **available Actions** from the dropdown: select the *Take* action now."

The Take action is selected.

Agatha: "Now, based on the action you selected a series of other dropdowns show up to define the other aspects of what we want the agent to do. In this case, the Take action requires an Item that the agent will pick up: select the *Gun* in Chamber B."

The Gun is selected.

Agatha: "Finally, submit the action to the timeline using the **Create** button."

The action is created.

Agatha: "There you go! With this action our agent will go and pick up the Gun, which means that they can then use it to kill one of the guests. Note that each agent can only **carry one item at a time**, so be careful when you pick multiple things."

Agatha: "Now, let's create an action to kill the Robot Dummy 1 at 15:00. If you remember at that point the robot was in Chamber C, so this should avoid being caught. As before, select the **15:00 timeline slot** and select the *Kill* verb."

The action creator is opened and Kill is selected.

Agatha: "As you can see the Kill action requires two other components, the first one being a guest to kill and the second one being a weapon to do it. So, select the *Robot Dummy 1* and *Gun* options and create the action."

The action is created.

Agatha: "Well done! Now, we could try executing the timeline like this and call it a day, but I fear that the other bot will see too many suspicious things: seeing a dead body will obviously arise suspicion, especially if they are covered in blood. Moreover, our agent would still be holding the weapon!"

Agatha: "Let's plan around it, shall we? First of all, we should get rid of the murder weapon by scheduling a **Drop action at 15:30** to put down the Gun in *Chamber D*: try do it yourself!"

Wait for the player to create the action.

Agatha: "That's good: now the agent won't be running around with the murder weapon anymore. Another thing to reduce the amount of suspicion points gained is **cleaning the blood** from the scene of the murder: this way it will look more like an accident."

Agatha: "Let's create a **Clean action at 16:00** then, selecting *Chamber C* as the target for our cleaning."

Wait for the player to create the action.

Agatha: "Look, the action we've just created occupies **two timeline slots** instead of one: this means that we can't schedule anything else in that second slot. Moreover if we were doing something suspicious like, say, *cleaning blood from a room*, there would be more chances for guests to see us doing it. Nevertheless, we'll take our chances with it!"

Agatha: "Finally, the last thing we can do to reduce suspicion is to actually **Talk** with guests. Not only will this reduce our suspicion level, but it will also stop the guest in the room they're in for a timeline slot."

Agatha: "I don't think we really need it here, but it sure can't hurt: schedule a **Talk action at 17:00** and select *Robot Dummy 2* as the target (*I'm sure you'll have some riveting conversations...*)."

Wait for the player to create the action.

Agatha: "Ok, it looks perfect now! Click on Start and let's give it a try!"

The game executes as normal. The player should win: after that, Agatha appears again.

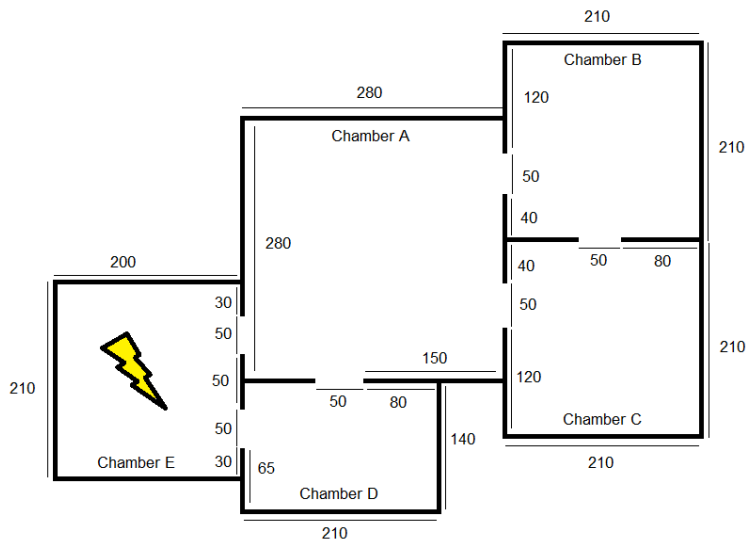
Agatha: "Great job! You've learned how to create actions perfectly: in the next lesson we'll wrap things up with a few notes on **Items** and **Guests** and then you'll be good to go!"

4.3. Tutorial 3

Teaching goals

- Adding and removing items to the map
- Guest and item descriptors
- Deleting and modifying actions
- Guest events

Level setup



Room decoration ideas:

- Chamber A, B, C, D: these are all test chambers like the ones from Portal 1&2. The ambient should be clean and cold like an operating room.

- Chamber E: this is the only distinction, as this room has a recharge station for the robots. This should be represented with a lightning sign on the floor and cables and other electrical objects on the walls.

- **Map:** same setting as before, only one more room
- **Guests:** 3 guests, Robot Dummy 1 & Robot Dummy 2 & Robot Dummy 3
 - Robot Dummy 1 stats:
 - *Descriptors:* none
 - *Interest levels:* Chamber A = 2, Chamber B = 3, Chamber C = 4, Chamber D = 1, Chamber E = 0
 - Robot Dummy 2 stats:
 - *Descriptors:* none
 - *Interest levels:* Chamber A = 1, Chamber B = 4, Chamber C = 3, Chamber D = 2, Chamber E = 0
 - Robot Dummy 3 stats:
 - *Descriptors:* Greedy
 - *Interest levels:* Chamber A = 2, Chamber B = 3, Chamber C = 4, Chamber D = 1, Chamber E = 5
- **Agents:** only 1 agent
- **Items:**
 - Gun
 - Cash

- **Timeline:** 6 slots from 14:30 to 17:00, already populated in the following way:

14:30	15:00	15:30	16:00	16:30	17:00	17:30	18:00	18:30
Guests		Recharge			Recharge			Recharge
Agent								

Script

Agatha appears on screen as always.

Agatha: "Hello there, welcome back! As you can see, we've expanded the test chambers again to give you a bigger environment to experiment in. We also have a new robot buddy now, aren't you excited?"

Agatha: "This is our last lesson, where I'll introduce you to the last few mechanics and systems at your disposal."

The Objects list is highlighted.

Agatha: "First of all, notice the **Objects list** in the bottom left of your screen. While in the previous levels I put items in the map for you, during the job you'll have to decide which objects to use and where to place them. Each level will make a specific selection of objects available."

Agatha: "You'll need at least a Weapon to kill the target. **Place the Gun** in the map by dragging and dropping its icon on a room."

The player places the Gun wherever they want.

Agatha: "Well done! We also have an optional item in this level, the *Cash*: as you can see right below its name, this is what we call a **Lure**, an object that can be used to attract certain guests. By hovering the pointer on the **descriptors** of an object you can get additional information about them: try it!"

Agatha: "To remove an item from the map, simply drag it out of any room: note that any actions that used the item will be lost if it is removed. Try **removing the Gun and then adding it back again.**"

Wait for the player to remove the Gun and add it back again.

The Guest list is highlighted.

Agatha: "Good job! Another thing that you might have noticed is that one of the guests now has a **descriptor** too: the Robot Dummy 3 is marked as *Greedy*. These type of information is usually given to us by the client: same as before, hovering over the text will describe what these tags mean. Take a guess at what 'Greedy' could mean and see if you were right!"

Agatha: "As we could have imagined, a Greedy guest will probably be lured by the Cash. When this happens, a guest will move to the room containing the lure and will spend their turn picking it up. **Add the Cash** to the map so that we can see this in action."

Wait for the player to add the Cash.

Agatha: "We're almost done! The last thing I want to talk to you about are **guest events**."

The timeline is highlighted.

Agatha: "As you can see, we've added a row to the timeline that contains some events in certain slots. These are vague indications of what the guests might do at those times: in our case the Robot Dummies are running out of battery, so they'll need to *Recharge* from time to time."

Agatha: "What these events actually mean is for you to discover and predict, but they offer useful information that will help you create better plans. Empty slots mean that the guests will just behave as normal."

Agatha takes a center role in the screen.

Agatha: "That is all! It is now time for your test: **complete this level** using all that I've taught you. If you can do it you'll be assigned your first real mission, so good luck and thank you for sticking with me!"

Agatha disappears and the player has to beat the level.

4.4. The Dinner

The most common murder mystery scenario: a dinner, 3 guests and a lot of backstabbing.

Map



Room decorations ideas:

- Entrance: a little "welcome" carpet and coat hangers on the walls
- Dining Room: a big rug and a fireplace on the wall, along with cabinets with plates
- Kitchen: fridges and other kitchen appliances on the walls
- Bedroom: cabinets and shelves with clothing on the walls
- Study: libraries, piles of books and anatomical skeletons on the walls

- **Entrance:**
 - ID 0
 - Decoration ideas: welcome carpet and coat hangers on the walls
- **Dining Room:**
 - ID 1
 - Decoration ideas: a big rug and a fireplace on the wall, along with cabinets with plates
- **Kitchen:**
 - ID 2
 - Decoration ideas: fridges and other kitchen appliances on the wall
- **Bedroom:**
 - ID 3

- Decoration ideas: bean bags, cabinets with clothes and shelves on the walls
- **Study:**
 - ID 4
 - Decoration ideas: libraries with books and anatomical skeletons on the walls

Characters

- **Agents:** 1
 - *Starting position:* Dining Room
- **Guests:** 3
 - **Detective:**
 - *Descriptors:*
 - Suspicious: adds 1 additional point of suspicion when they see something suspicious
 - *Starting position:* Entrance
 - *Interest levels:*
 - Entrance: 2
 - Dining Room: 3
 - Kitchen: 1
 - Bedroom: 0
 - Study: 4
 - **Femme fatale:**
 - *Descriptors:* none
 - *Starting position:* Entrance
 - *Interest levels:*
 - Entrance: 3
 - Dining Room: 4
 - Kitchen: 0
 - Bedroom: 2
 - Study: 1
 - **Businessman:**
 - *Descriptors:*
 - Greedy: considers Cash as a lure
 - *Interest levels:*
 - Entrance: 0
 - Dining Room: 3
 - Kitchen: 1
 - Bedroom: 4
 - Study: 2

Timeline

- **Length:** 8 timeslots, from 22:00 to 01:30
- **Guest events:** none

Items

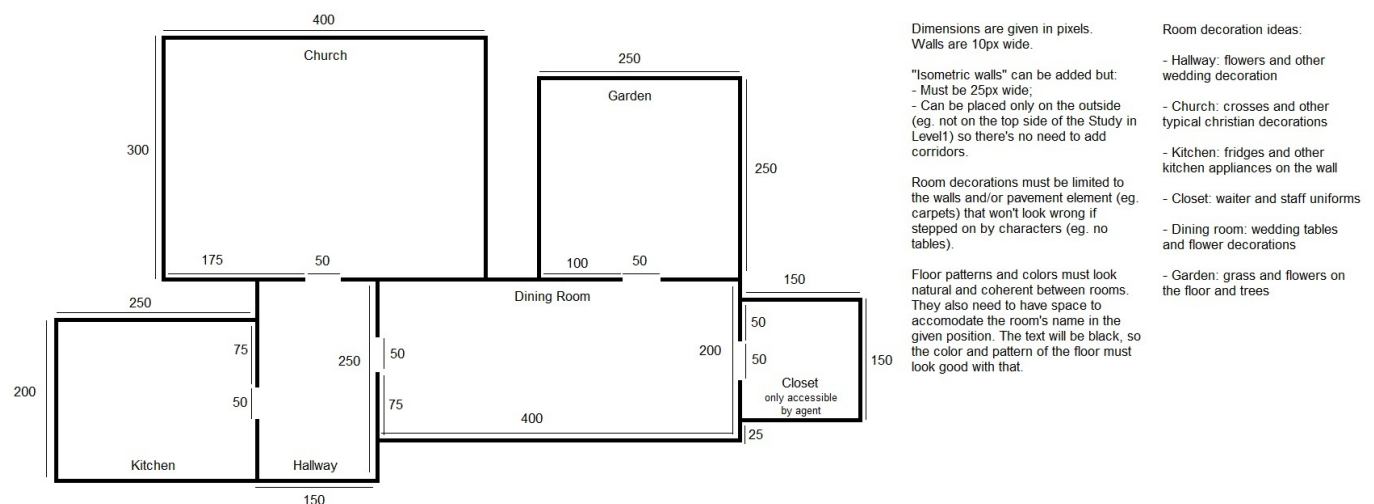
- **Knife:**
 - *Category:* Weapon
 - *Descriptors:*
 - Slow: using this weapon to kill adds 1 timeslot to the action
 - *Starting position:* none
- **Gun:**
 - *Category:* Weapon
 - *Descriptors:*
 - Loud: using this alerts all guests in nearby rooms and adds suspicion
 - *Starting position:* none
- **Cash:**
 - *Category:* Lure
 - *Descriptors:* none
 - *Starting position:* none

4.5. The Wedding

We are at the wedding of the century! The Countess and the Count are getting married in this magnificent villa. They are very devoted to the Lord, so it will be a modest wedding, without alcohol, centered on peace and love... yet, you've been tasked with killing the bride! Perhaps you should take advantage of one of her little vices...

Notes: This is the very first level where the player will encounter new features without any prior explanation. These features will enhance the gameplay, introducing new layers of strategies and possibilities.

Map



- **Hallway:**
 - ID 0
 - Decoration ideas: flowers and other wedding decoration
- **Church:**
 - ID 1

- Decoration ideas: crosses and other typical christian decorations
- **Kitchen:**
 - ID 2
 - Decoration ideas: fridges and other kitchen appliances on the wall
- **Closet:**
 - ID 3
 - Decoration ideas: waiter and staff uniforms
 - **Note:** only accessible by agents
- **Dining room:**
 - ID 4
 - Decoration ideas: wedding tables and flower decorations
- **Garden:**
 - ID 5
 - Decoration ideas: grass and flowers on the floor and trees

Characters

- **Agents:** 1
 - *Starting position:* Hallway
- **Guests:** 3
 - **Priest:**
 - *Descriptors:*
 - Greedy: considers Cash a lure
 - *Starting position:* Church
 - *Interest levels:*
 - Hallway: 0
 - Church: 0
 - Kitchen: 0
 - Closet: 0
 - Dining Room: 0
 - Garden: 0
 - **Bride:**
 - *Descriptors:*
 - Alcoholic: considers Wine a lure
 - *Starting position:* Church
 - *Interest levels:*
 - Hallway: 0
 - Church: 0
 - Kitchen: 0
 - Closet: 0
 - Dining Room: 0
 - Garden: 0
 - **Groom:**
 - *Descriptors:* none
 - *Starting position:* Church
 - *Interest levels:*

- Hallway: 0
 - Church: 0
 - Kitchen: 0
 - Closet: 0
 - Dining Room: 0
 - Garden: 0
- **Best Man:**
 - *Descriptors:* none
 - *Starting position:* Church
 - *Interest levels:*
 - Hallway: 0
 - Church: 0
 - Kitchen: 0
 - Closet: 0
 - Dining Room: 0
 - Garden: 0
- **Father-in-law:**
 - *Descriptors:* none
 - *Starting position:* Church
 - *Interest levels:*
 - Hallway: 0
 - Church: 0
 - Kitchen: 0
 - Closet: 0
 - Dining Room: 0
 - Garden: 0
- **Chef:**
 - *Descriptors:* none
 - *Starting position:* Kitchen
 - *Interest levels:*
 - Hallway: 0
 - Church: 0
 - Kitchen: 0
 - Closet: 0
 - Dining Room: 0
 - Garden: 0

Timeline

- **Length:** 12 slots, from 10:00 to 15:30
- **Guest events:**
 - **Wedding:**
 - *Timeslot range:* 0 - 2 (10:00 - 11:00)
 - *Permitted room IDs:* 1 (Church)
 - *Involved guests:* Priest, Bride, Groom, Best Man, Father-in-law
 - *Allow movement inside the same room:* no

- **Dinner:**
 - *Timeslot range:* 3 - 5 (11:30 - 12:30)
 - *Permitted room IDs:* 4 (Dining Room)
 - *Involved guests:* Bride, Groom, Best Man, Father-in-law
 - *Allow movement inside the same room:* no
- **Party:**
 - *Timeslot range:* 6 - 12 (13:00 - 11:30)
 - *Permitted room IDs:* 5 (Garden)
 - *Involved guests:* Bride, Groom, Best Man, Father-in-law
 - *Allow movement inside the same room:* yes

Items

- **Clever:**
 - *Category:* Weapon
 - *Descriptors:*
 - Guarded: if someone sees the agent take it, the player loses
 - *Starting position:* Kitchen, cannot be removed
- **Wine:**
 - *Category:* Lure
 - *Descriptors:*
 - Guarded: if someone sees the agent take it, the player loses
 - *Starting position:* Church, cannot be removed
- **Cash:**
 - *Category:* Lure
 - *Descriptors:* none
 - *Starting position:* none
- **Cash:**
 - *Category:* Lure
 - *Descriptors:* none
 - *Starting position:* none

Script

Agatha appears at the center of the screen and starts talking with a text bubble. The background is heavily obscured.

Agatha: "Hi there, seems you have a new mission."

Agatha: "AH AH AH, **Bried-Killing**. My favourite. (*A classic, indeed*) Usually it's an hard task and this is one of those cases. The access to the ceremony is very hard, so you can not bring weapons with you...you must **find something there**"

Agatha: You are lucky. You can have a Closet all for you! **No one can enter there for no reason**...make the most of it.

Agatha: One last advise...the brides usually seem pure and innocent, but they have more then one **secrets to hide** (*as I have...*) Good luck.

5. Media list

5.1. Aesthetics

The game has a **cartoonish and humorous aesthetic** in the likes of games like [Overcooked](#) and [Among Us](#). It will feature a unique 2D art style crafted by an in-house artist with a focus on functionality: key elements like items and guests will be highlighted in order to make the game state immediately readable for the player.

The art assets will be realized primarily in the SVG format: not only will this increase the artist's productivity and the modularity of the assets themselves, it will also grant the game a unique style.



5.2. Required assets

The following list details the different assets that the game will require.

- **Sprites**

- Characters

- Agent
 - Guest: Robot Dummy 1
 - Guest: Robot Dummy 2
 - Guest: Robot Dummy 3
 - Guest: Detective
 - Guest: Femme fatal
 - Guest: Businessman
 - Guest: Priest
 - Guest: Bride
 - Guest: Groom
 - Guest: Best Man
 - Guest: Father in Law
 - Guest: Chef

- Status icons

- "!" for surprise
 - "?" for suspicion
 - "heart" for attraction
 - "blood stain"

- "x" for corpse eyes
 - Items
 - Gun
 - Knife
 - Cash
 - Clever
 - Holy Wine
 - Maps
 - Tutorials
 - The Dinner
 - The Wedding
- **UI**
 - Play, restart, speed up and stop buttons
 - Action definition popup
 - Timeline representation
 - Objectives, guests and items lists
 - Suspicion level bar
 - Main menu & level selection screens
- **Music**
 - Background music for the planning phase
 - Background music for the execution phase
- **SFX**
 - UI clicks
 - Character interactions sounds
 - Agent walk
 - Guest death
 - "Mhmmm" for "?" icon
 - "Gasp!" for "!" icon
 - "Love" for "heart" icon
 - Items usage sounds
 - Gun fire
 - Knife/Clever slashing

6. Technical specification

The game will use Unity 2022.3.50f1 as a game engine, which was chosen thanks to its relative ease of use and the free license provided to university students.

For versioning we will use Git, with Github as a remote repository provider. The [Readme](#) file of this repository then describes a detailed style guide as well as a few rules on the usage of Git for the project.

Lastly, [Github Wikis](#) will be used to house code documentation, improving the project's modularity and reducing the need to discuss code.