**Short description:** A game where we will play as an archaeologist who will have to search for dinosaur bones, and then from them to assemble a whole skeleton

Genre: Puzzle

**Most interesting/distinctive elements:** The mechanics of collecting the skeleton, conveying the atmosphere of an archaeologist's work.

## Pre-stage tasks:

- Choosing a title
- Select a font
- Choosing a graphic style
- Preparing a sketch of a dinosaur skeleton
- Select music
- Select sounds
- UI sketches
- Working out the transition between interfaces
- Preparing a template for the game
  - Customization window
  - Localization
  - Saving
  - Sound

# **Basic Concept:**

## The archaeologist's desk window (it is also the menu)

## Elements:

- Settings button (gear?).
- Energy icon with a counter
- A button to go to excavation.

Have to figure out how it will look like. Options from me:

- maybe like a die with a pebble with a mini dinosaur skeleton imprinted on it
- like the previous one, but instead of a skeleton a skull.
- a map with a spatula and a tassel crossed over it.
- archaeological helmet
- some earth texture (kind of poured on the table) and on it a map (or a piece of map)

Instruction button (designed as a clipboard with a clothespin with a question). Options:

- 1. At startup, it blinks and must be pressed without fail
- 2. Or it opens forcibly at startup
- 3. or another option
  - The place where the bones are stacked in a pile, and from where we take the bones and try to put them in the right place
  - The outline with the dinosaur.

Maybe we should add a counter of bones collected? (Like 15/21 dice)

#### Concept:

- 1. We read the instructions then go to the excavation window.
- 2. When we find bones on the excavation go to the table of archaeologist
- 3. On the table we take a bone from the pile and try to connect it with the outline of the dinosaur.
- 4. The bone can be twisted and moved with the mouse.
- 5. If the bone is in the right place, it becomes magnetized and blinks a few times.
- 6. When we collect all the bones into a skeleton applause plays and stars (or something else, I don't know) fly up.

## Excavation window.

- Pointer (brush)
- Ground with grass
- Energy icon with meter
- Icon of the button to go to the archaeologist's desk.
- Maybe we should add a dice counter here too?

There is an option for the table to slide in and out.

#### Concept:

- 1. When creating a layout dice are generated at random locations and on random layers
- 2. On each layer there are 10 bones and a few false elements
- 3. We see some contours on the ground. Under them may be bones, or false items: a tin can, a stick, a rusty wrench
- 4. The player must dig up all the bones on the layer.
- 5. Energy points are spent for each brush job.
- 6. Each second restores a certain amount of energy points.
- 7. When all the bones on the layer are collected the current layer is removed, and we move to the next layer (it may be worth showing the depth of the layer, or not)

Sound icon

Music icon

## **Programming Stage:**

## Archaeologist's desk:

- Realization of magnetization of bones to the base. (make each sprite have 2 points, which should overlap each other and then the magnetization is ensured) 15-20 minutes.
- 2. Realization of blinking of the bones if they were magnetized. (easy, 5 minutes)
- 3. Realization that progress is not reset when moving from one window to another (I will make it all be in one layout) (5-10 minutes)
- 4. Realization of the energy meter (5 minutes)
- 5. Creating a sprite of the transition to the excavation window (5 minutes)
- 6. Creating a tablet with unfolding instructions (15-20 minutes)
- 7. Creating an unfolding victory display effect (10 minutes)
- 8. Victory condition (all dice are in place) is done in the following way: when each dice is placed, it is marked as placed, and then the function goes through all dice and calculates whether all dice are in place (if all dice are in place, then the victory display window is launched) (10-15 minutes)
- 9. Implementation of the mechanics of dice rotation (we need to show rotation arrows above the active dice) (15 minutes)

### **Excavation window:**

- 1. When starting the game generation of bone locations on different layers and different coordinates (10 min)
- 2. Placing contours over the bone (5 min)
- Prescribing the condition that the bone blinks and glows when it is completely cleared (click on the bone => it moves to the pile of bones on the table) (10 minutes)
- 4. Prescribing mechanics that the bone realizes that there is nothing above it (15-20 minutes)
- 5. Mechanics of hiding a layer when all the bones on the layer are collected. (after each bone is collected it checks how many bones are on the layer) and that you can remove bones on another layer (10 minutes)

## **Graphics Stage:**

- 1. Dinosaur complete
- 2. Bones separately
- 3. False bones (stick, tin can, wrench)
- 4. Archaeologist's table (can separate table texture, separate frame, or I don't know how to do it)
- 5. Bone outline (seems to be easy to make in photoshop)
- 6. Rough outline for the elements (to display on the ground)
- 7. A clump of grass (or maybe you don't have to)
- 8. Ground texture
- 9. Tablet icon (you don't have to make one, I have an icon)
- 10. Close-up tablet (for instructions)
- 11. Icon of transition to the excavation window
- 12. Icon of transition to the archaeologist's desk window
- 13. Brush for the excavation window
- 14. Another pointer for the archaeologist's window (or maybe I don't need one)
- 15. Energy icon