Project Proposal

Group members:

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Group name:

Team Pipe Dream

Provide a high-level prose description of your project.

We are looking to create a 2D puzzle game where the objective is to rearrange a board of two-directional pipes so that the flow can get to from the input to the output. The game will be timed so that the flow begins and the player has to race the speed of the flow to arrange the right sequence of pipes in time before the flow hits a block or goes off the board to win a level.

Describe the major features of your project. (Checklist format of at least five)

_ 2D graphics
_ In-game Audio cues
_ Timing based events
_ User interaction with the mouse
_ Pre-made levels, or automatically generated ones

Describe the advanced feature(s) of your project, and the library/SDK/API you plan to use.

2D graphics and Audio - game plan is to use Simple DirectMedia Layer for these features

Describe plans for what kind of user input your program will take and how it will affect the state of the program.

We plan on doing user input through mouse interaction. The player should be able to swap pipes by either clicking and dragging or clicking the first, and then the second (Have yet to decide on which of these would be better). There should also be a button the user can click if they've completed their path to make the flow immediately go to the end so if they finish early they don't have to wait for the level to complete.

Briefly describe plans for dynamic memory management and class inheritance structure.

The Pipe tiles will be represented with a class type, which may be abstract depending on how many different types of tiles and tile behaviours we are looking to include. The board itself could

just be a two dimensional array of Tiles, but we will probably need more than that, so the board will likely have its own class.