



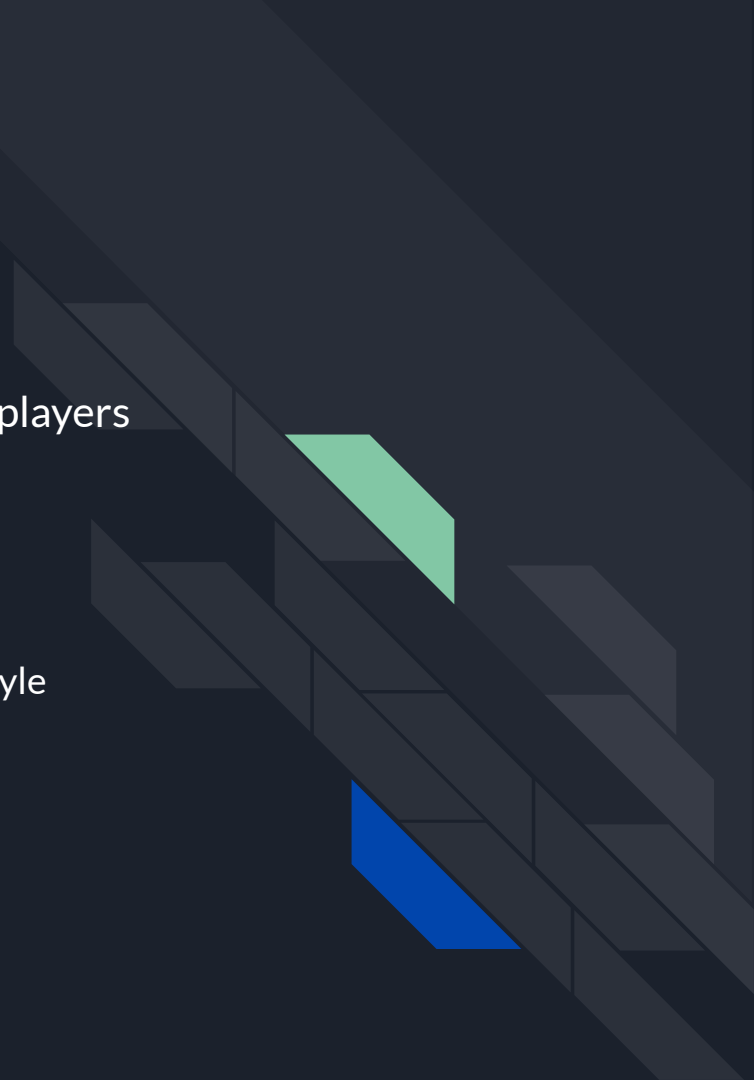
Venus

Your personal game assistant

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Project Vision

- In-game machine learning AI that assists struggling players
- Distinct from starter NPC helpers
 - Ability to observe and analyze user's game play
 - Dynamic interaction
 - Independent from the game
 - Learning as the user does, it emulates a human playstyle
- Level of guidance modulated to:
 - Prevent “cheating”
 - Still serve a challenge for user to keep their interest
 - Create gameplay that scales with the user





Problem Statement

- Adding an AI helper, Venus, into a game where the user is having difficulty
 - Venus will analyze the user's playing-style and will adapt to the level of difficulty
 - After analysis, Venus will offer tips/hints to assist the user, but the tips won't be excessive
- Tutorials in games are often too complicated for the user to comprehend
- Venus will make the user's experience more fun and achievable on any level of difficulty
- End goal is to encourage users to play any kind of game despite the level of difficulty
 - User's experience will positively benefit with the inclusion of Venus



Requirements

- 01 An interactive open source game with a mostly well maintained code base
- 02 Design and build a game guide named “VENUS”
- 03 Gameplay shouldn't be too easy or hard; smooth sailing with the game guide
- 04 Assistant without actively changing user input



Process

- A mod/addon/DLC to the existing game
- Anything the player passes thru will pass thru Venus then to the game
 - Player → Venus → Game
 - Game → Venus → player
- Run a model/predictive method that will try to get the best outcome for the user
 - Shown as hints via the sprite character
- Game input sent to Venus to learn from the outcomes
- Data saved in original game section, with a parallel section for Venus
 - Both are pulled simultaneously at start of game
- Timeline Draft
 - In depth research on AI usage in game development → find source code for open source game
 - decide on best language to use → create user stories and mock ups
 - identify potential risks → develop



Risks

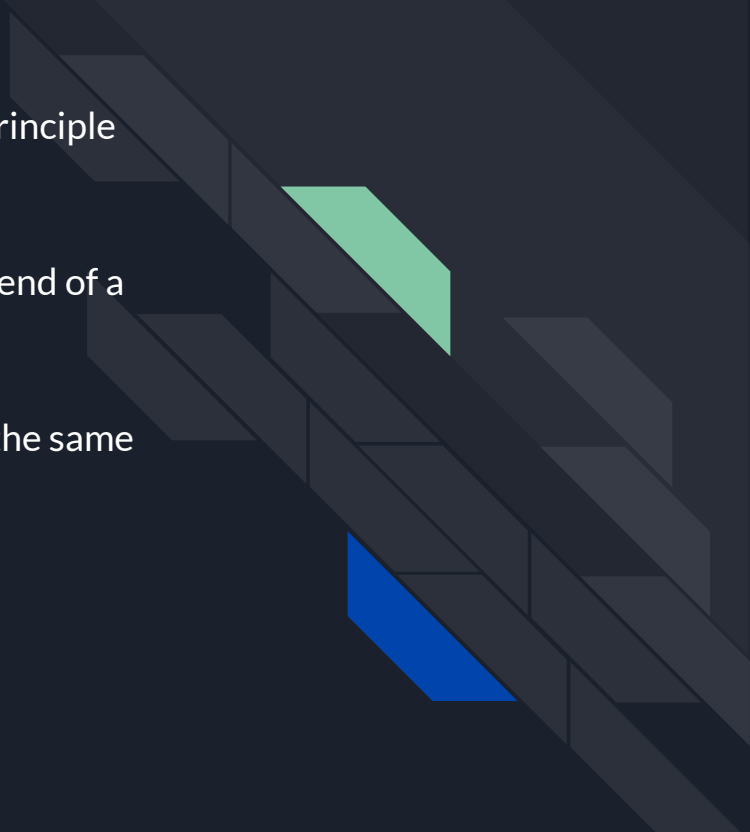
1. Being able to integrate with and modify an existing code base.
2. Finding suitable open source game.
3. Reinforcement of right strategy may take too long.

Plans

1. Find a FOSS game with a tested codebase
2. Allow AI to play the game itself, develop strategies, then compare to what player has done.

Features

- Learns from user's play-style
- After many "deaths/losses/rage" quits, Venus can offer its principle role in offering advice/tips, *actual help*
- Can be put in a view only mode
 - Observes the player play and then offer advice at the end of a play session
- Also only have access to the players view
 - Still have a fog enabled so it can only experience it at the same time the player does



Possible Game Choice



An escape room kind of game

Issues encountered:

- Too little context
- Much time spent randomly clicking

The House Reviews

The screenshot shows the escapegames24.com website. The browser address bar indicates the URL is escapegames24.com. The page features a central review section with user comments, a left sidebar with 'POPULAR DEVELOPERS', and a right sidebar with 'MONTHLY MOST POPULAR GAMES' and 'YEARLY MOST POPULAR GAMES'.

Reviews:

- Unknown** 9/5/13, 7:13 AM: I'm stuck where you need to put the number combination in the keypad. I fed it to the furnace by mistake lol
- Zazie** 9/5/13, 7:14 AM: When you looked out of the window, go back to the fish and talk again. Tell him that you have looked out of the window, when you go back there is a corridor key on the bottom.
- EvillrishPixi** 9/5/13, 7:15 AM: Why the switch?
- clio_rose** 9/5/13, 7:15 AM: Well, apart from the map? and the twig, i cant do a thing. I cant put the twig on the tree outside the window, nor take the twig from the rightside view out the window. I cant go out of the corridor because its locked. Truly i think this may be a game for either brainiacs or players with stable tummies.
- clio_rose** 9/5/13, 7:17 AM: (partially visible)

Left Sidebar: POPULAR DEVELOPERS

- 5nGames Games
- 8bGames Games
- Amajeto Games
- AmgelEscape Games
- AvmGames Games
- Big Escape Games
- Carmel Games
- EkeyGames Games
- EscapeGames24 Games
- First Escape Games
- Flash512 Games
- Fun Escape Games
- FunkyLand Games
- Games2Jolly Games
- Games2Rule Games
- Games4Escape Games
- Games4King Games

Right Sidebar: MONTHLY MOST POPULAR GAMES

- SD Sneaky Escape Ocean Villa
- SD Sneaky Escape Shark Manor
- SD Sneaky Escape Palm Vista
- Esklavos - Leonor and Raúl: The Key
- Amajeto Classic Room Escape
- SD Hooda Escape Phoenix 2023
- SD Hooda Escape Chicago 2023
- SD Hooda Escape Philadelphia 2023 Walkthrough
- SD Hooda Escape Houston 2023
- SD Hooda Escape Los Angeles 2023

Top Right Banner: MARCH 24 - APRIL 8, 2023 THE VENETIAN RESORT LAS VEGAS ON SALE NOW

Bottom Right: YEARLY MOST POPULAR GAMES (with an upward arrow icon)

- Venus can address these issues in several ways
- Methods:
 - Give hints on when to use certain items
 - Provide a sense of direction if player gets stuck on a certain part for a period of time

Questions?

