

# PROJECT VALENCE

A MULTIPLAYER  
CHEMISTRY ADVENTURE



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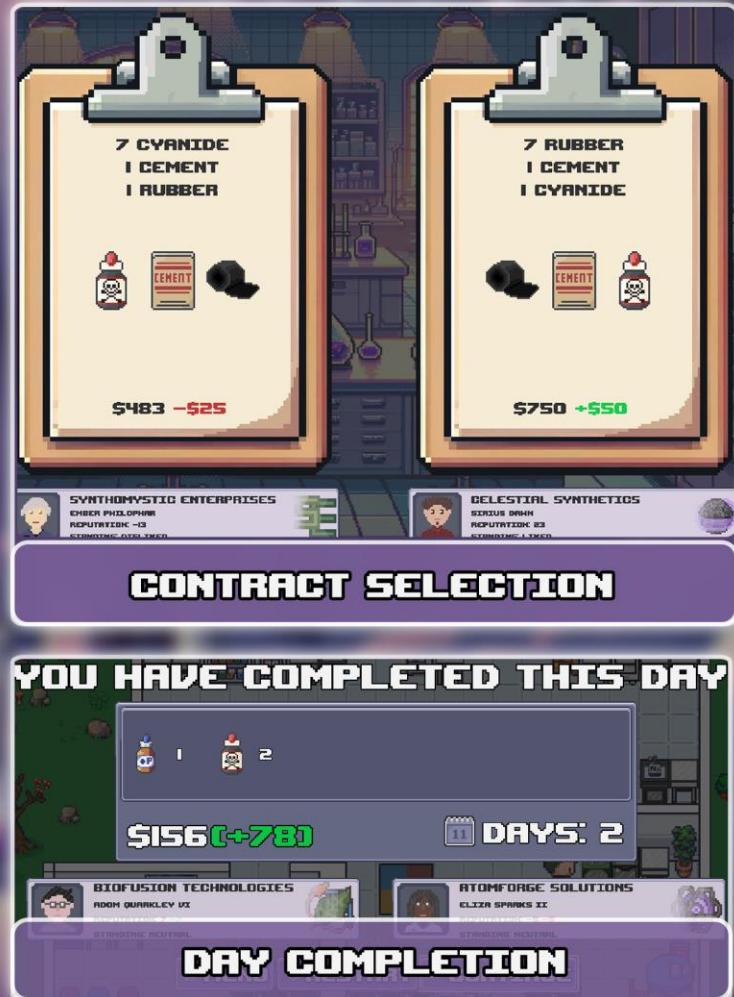
# WHAT IS OUR PROJECT?

## A CASUAL CHEMISTRY GAME

- QUICK ROUNDS (5 MINS)
- WORK TOGETHER TO CRAFT COMPOUNDS
- DEAL WITH HAZARDS

## CONTRACTS GIVE A DAILY GOAL

- GAIN REWARDS AND REPUTATION
- EARN MONEY AND SET HIGH SCORES
- FAILING CONTRACTS RESETS YOUR RUN



# MEET THE TEAM!



MICHAEL OSACHOFF

NICOLAS ANSELL

JULIAN GONZALES

CAMERON WILSON

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MICHAEL OSACHOFF

## MULTIPLAYER LEAD

- CONVERTED SINGLE PLAYER MECHANICS
- CREATED BACKEND SERVER AND CLIENT SETUP
- IMPLEMENTED LAN MULTIPLAYER LOBBIES

## UI/UX IMPLEMENTATIONS

- DESIGNED MAIN MENU AND SOME IN-GAME GUI
- MULTIPLAYER JOIN, HOST, AND LOBBY MENUS
- MULTIPLAYER SERVER ERROR FEEDBACK

# MEET THE TEAM!



NICOLAS ANSELL

## UI/UX LEAD

- CONTRACT SELECTION AND MONITORING
- RECIPE BOOK IMPLEMENTATION
- MACHINE INVENTORY INTERFACES
- ITEM PICKUP AND DROP-OFF DEPOTS

## ART AND ASSET CREATION

- CREATED ALL ITEM SPRITES
- MACHINE SPRITES AND INDICATORS
- HAZARD ANIMATIONS AND EQUIPMENT SPRITES

# MEET THE TEAM!



JULIAN GONZALES

## LEVEL DESIGN LEAD

- DESIGNED ALL GAME LEVELS
- IMPLEMENT RANDOM LAYOUT GENERATION
- LEVEL BACKGROUNDS

## BACKEND DEVELOPMENT

- CREATED END OF DAY INFO DISPLAYS
- DYNAMIC TOOLTIPS FOR PLAYSTATION, XBOX, PC
- PLAYER CONTROL AND ANIMATIONS

# MEET THE TEAM!



CAMERON WILSON

## BACKEND LEAD

- CONTRACT MANAGEMENT SYSTEMS
- HAZARD LOGIC AND DESIGN
- COMPANIES AND REPUTATION SYSTEM

## AUDIO/SFX DESIGN

- MACHINE AUDIO DESIGN
- IN GAME SOUNDTRACKS
- UI INTERACTION SOUNDS

# INSPIRATIONS FOR PROJECT VALENCE

## PLATE UP!

- DEVELOPED BY YOGSCAST GAMES
- RUN A RESTURANT
- DEAL WITH INCREASING CUSTOMERS AND MORE COMPLEX DISHES



PLATE UP!

## BINDING OF ISAAC

- DEVELOPED BY NICALIS INC.
- RANDOM LEVEL LAYOUTS
- PROGRESSING UPGRADES
- INCREASING ENEMY DIFFICULTY



THE BINDING OF ISAAC

# WHO IS OUR GAME FOR?

## OUR GAME IS FOR EVERYONE!

- EASY TO LEARN
- CAN PICKUP AND PUTDOWN AT ANY TIME
- NOT A LARGE TIME COMMITMENT

## ENJOY MANAGEMENT GAMES?

- COMPLETE CONTRACTS BY DAY END
- PREP ITEMS WHILE MACHINES RUN
- PUT OUT FIRES AND CLEAN UP MESSES



# WHY DID WE MAKE IT?



# ASSETS AND ART

## CUSTOM ASSETS

- NICOLAS DESIGNED A MAJORITY OF ITEMS,  
MACHINES SPRITES, AND ANIMATIONS
- JULIAN ASSISTED IN ITEM CREATION, AND  
ICONS

## PURCHASED ASSETS

- MODERN RPG PACKS BY LIMEZU
  - EXTERIORS PACK
  - UI PACK
  - INTERIORS PACK



SOME OF OUR ITEMS

# TECHNOLOGY

## BUILT IN GODOT

- FREE AND OPEN SOURCED GAME ENGINE
- WRITTEN IN GDSCRIPT
- 2D MOBILE RENDERING ENGINE
  - REDUCED RENDERING OVERHEAD
  - COMPATIBLE WITH OLDER DEVICES

## ASSETS IN ASEPRITE

- ASEPRITE USED FOR ALL CUSTOM ASSETS
- BUILT FOR PIXEL ART AND ANIMATING



GODOT VERSION 4.2



ASEPRITE

DEMO

# WHAT DID OUR TESTERS FIND FUN?

"PRIORITIZING THE ROUTE, ATTEMPTING TO FIND THE BEST AND SHORTEST PATHS TO USE FOR EACH STEP. ATTEMPTING TO USE "BAKE TIME" TO SET UP OTHER RECIPES. REMINDED ME OF THE OLD DINER DASH GAMES, AS SILLY AS IT MAY SOUND. GET THE RIGHT THINGS FROM A TO B AS QUICKLY AS POSSIBLE."

— SHAUN



"MAKING PENICILLIN IN THE HOPES THAT IT WILL FREE THE LITTLE GNOME. HONESTLY THOUGH MAKING STUFF AND GETTING THE ROUTE DOWN FOR DIFFERENT MAPS IS DECENTLY FUN."

— JOSHUA





**QUESTIONS AND COMMENTS?**

**THANK YOU FOR COMING!**

**COME PLAY OUR GAME IN CK-185**

**VISIT OUR  
GITHUB**

