

Eggly Buddies Milestone 4 Submission

Team members:

BY - byou
TH - hasmant
NH - yessir
EC - echen05
CZ - qihongz
DD - dengzc

Game Balance

- Adjusted minigame rewards and difficulty so that the amount of stats gained from each minigame makes more sense and paces the gameplay better
 - Backyard minigame increases in difficulty as you complete each level
 - Bedroom minigame enemies increases in speed(difficulty) as the game goes on
 - Bathroom minigame gift box shuffle speed increases as the game goes on
- Adjusted speed of buddy status bars depletion so that the pacing of the story is better
- Adjusted rate at which buddy ages and at which ages the buddy changes from baby to teen and teen to adult
- Interactions between different rooms for more fluid gameplay
 - Food harvested from backyard impacts ability to play kitchen minigame
- Adjusted soap duration time to not fully filled hygiene status bar

User Interactions

- Players report being unsure what actions to take, used Text rendering to add clearer gameplay instructions
- Players report being unsure which objects can be clicked on, so now objects that can be clicked now glow on hover
- Story-telling with initial cut scene to make instructions / motives more clear
- Rewards from minigames have more impact on gameplay/story
 - Soap from Bathroom minigame allows you to increase hygiene status bar
- Players report inverted status bars are not as intuitive, so we inverted the status bars

Proposed Development Plan:

Skeletal Game

Week 1

- ☒ ~~Layout basic class structure~~
- ☒ ~~Create main scene~~
- ☒ ~~Base sprite assets~~

Week 2

- ☒ ~~Basic physics / collision detection for creature colliding into walls and objects in the room~~
- ☒ ~~Established foundation for single room: living room so that future scenes are easy to implement~~
- ☒ ~~Keyboard / mouse control of character sprite~~

Week 3

- ☒ ~~Implement gravity with an apple that bounces~~
- ☒ ~~Implement parallax~~

Minimal Playability

Week 1

- ☒ ~~Complete transitions between scenes (add new sprites and background assets for new rooms)~~
- ☒ ~~Add new entities and gameplay functionality to each room~~
- ☒ ~~Add logic for when to move to a different scene (e.g. taking a bath after playing outside)~~
 - ☒ ~~Since this is more complex logic, this was moved to Playability~~
- ☒ ~~Add minigames to scenes~~
 - ☒ ~~This was started here and will be continued in future weeks / milestones~~
- ☒ ~~Background music / sound effects~~
 - ☒ ~~Moved to Playability~~

Week 2

- ☒ ~~Add classes to track creature personality and status (e.g. hunger, tiredness, etc)~~
 - ☒ ~~This was started for cleanliness only, and will be expanded on in future milestones~~
- ☒ ~~Basic user tutorial / help menu → access from mailbox screen (e.g. incoming mail to teach you what to do)~~
- ☒ ~~Inventory system/interacting with items using mouse~~
- ☒ ~~Menu / UI to display personality and status~~
- ☒ ~~Basic mechanics for sleeping minigame (infinite runner)~~

Playability

Week 1

- ☒ ~~Implement saving of game state + reloading~~
- ☒ ~~Add classes to track creature personality and status (e.g. hunger, tiredness, etc)~~
- ☒ ~~Menu / UI to display personality and status~~
 - ☒ ~~Was started above and will be continued on here~~
- ☒ ~~Continue working on minigames~~
- ☒ ~~Add logic for when to move to a different scene (e.g. taking a bath after playing outside)~~

Week 2

- ☒ ~~Finish minimally playable minigames for each scene (backyard, bedroom, garden, living room / main scene, bathroom)~~
 - ☒ ~~Started this, will keep working on this for the next milestone~~
- ☒ ~~Smooth transitions between scenes~~
- ☒ ~~Finish creature animations~~
- ☒ ~~Background music / sound effects~~

Final Game

Week 1

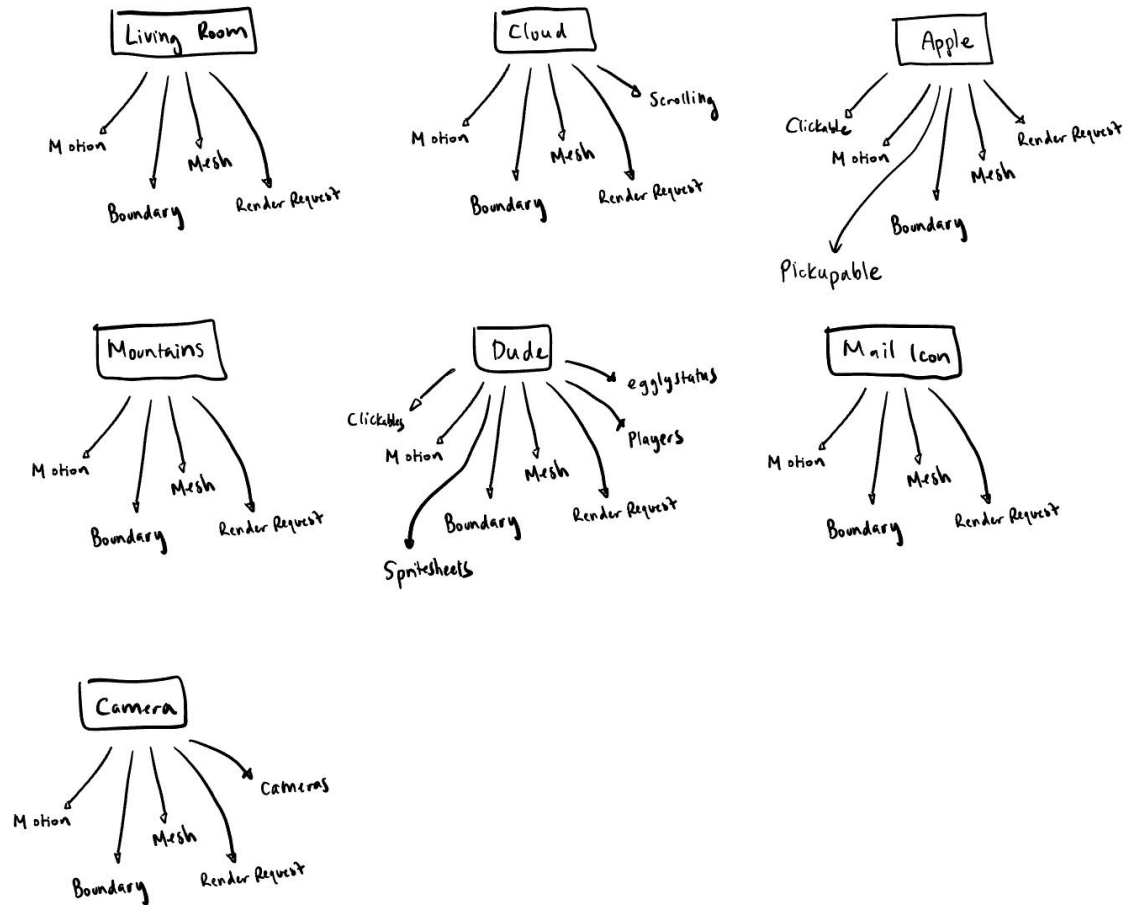
- ☒ ~~Advanced gameplay: features such as advanced decision-making mechanisms based on goals (path planning etc)~~
- ☒ ~~Finalize all mini-games~~
- ☐ ~~Surprise events differ based on personality and status~~
 - ☐ ~~Moving to backlog → will finish before cross-play if time (potentially might change a bit)~~
- ☒ ~~User testing + bug fixing!!~~

Week 2

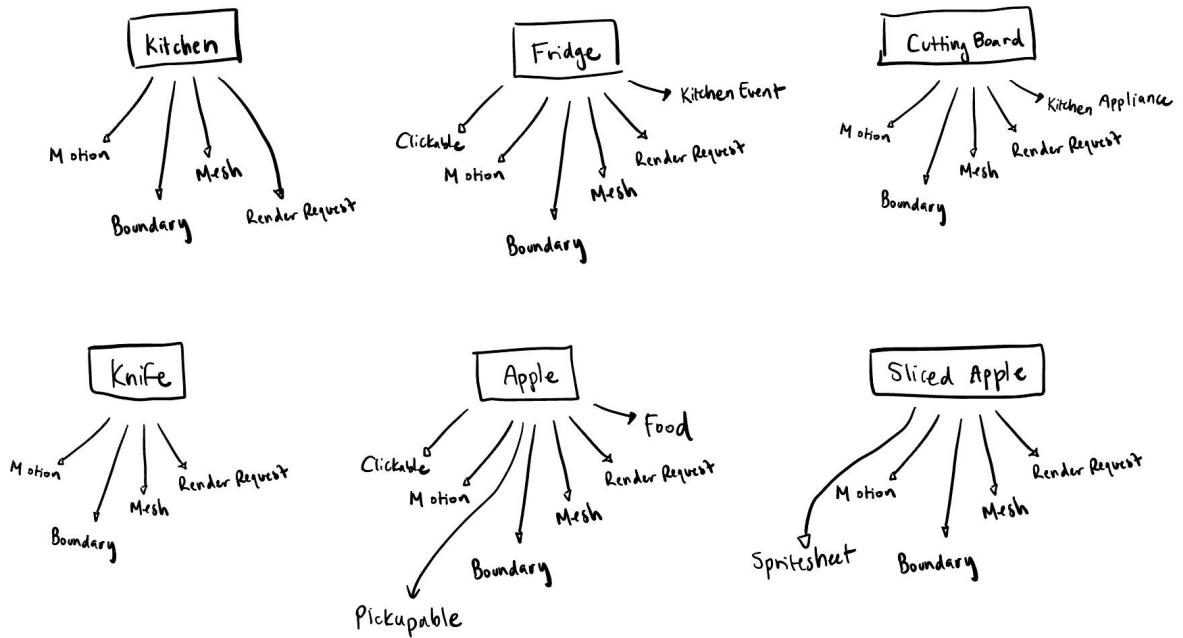
- ☒ ~~Finalize sound effects for all interactions~~
- ☒ ~~Finalize all assets~~
- ☒ ~~Finish age system so buddy can grow up and leave home (end game)~~
- ☒ ~~Additional elements and details as needed~~

Game Design Documentation

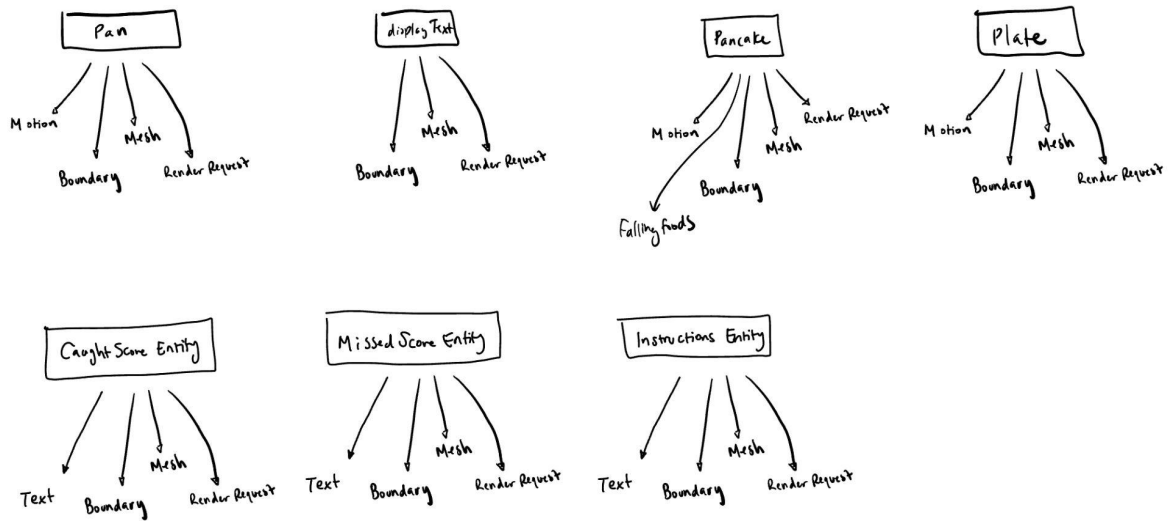
Below are the ECS design pattern diagrams, separated by room. Each diagram includes interactions between entities and components.



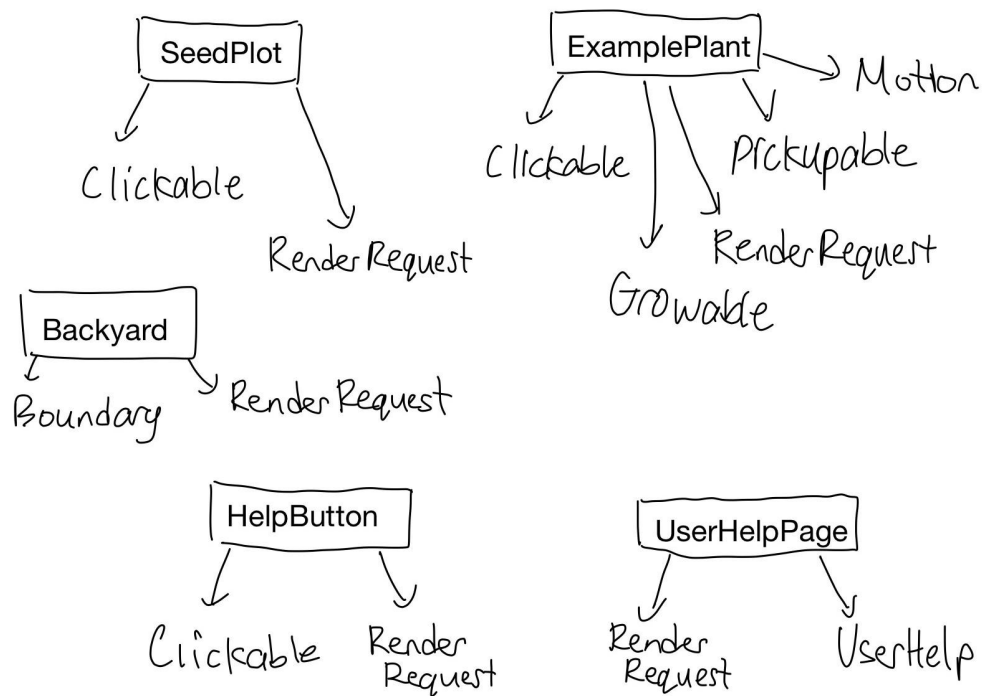
ECS design pattern diagram for the Living Room.



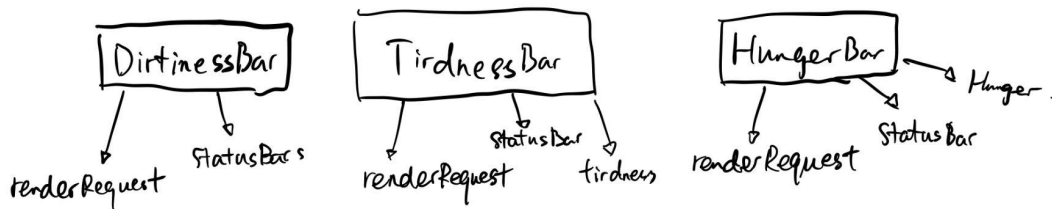
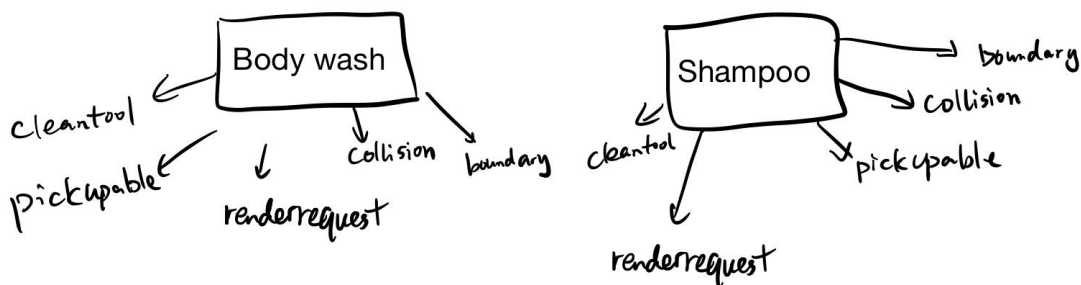
ECS design pattern diagram for the Kitchen.



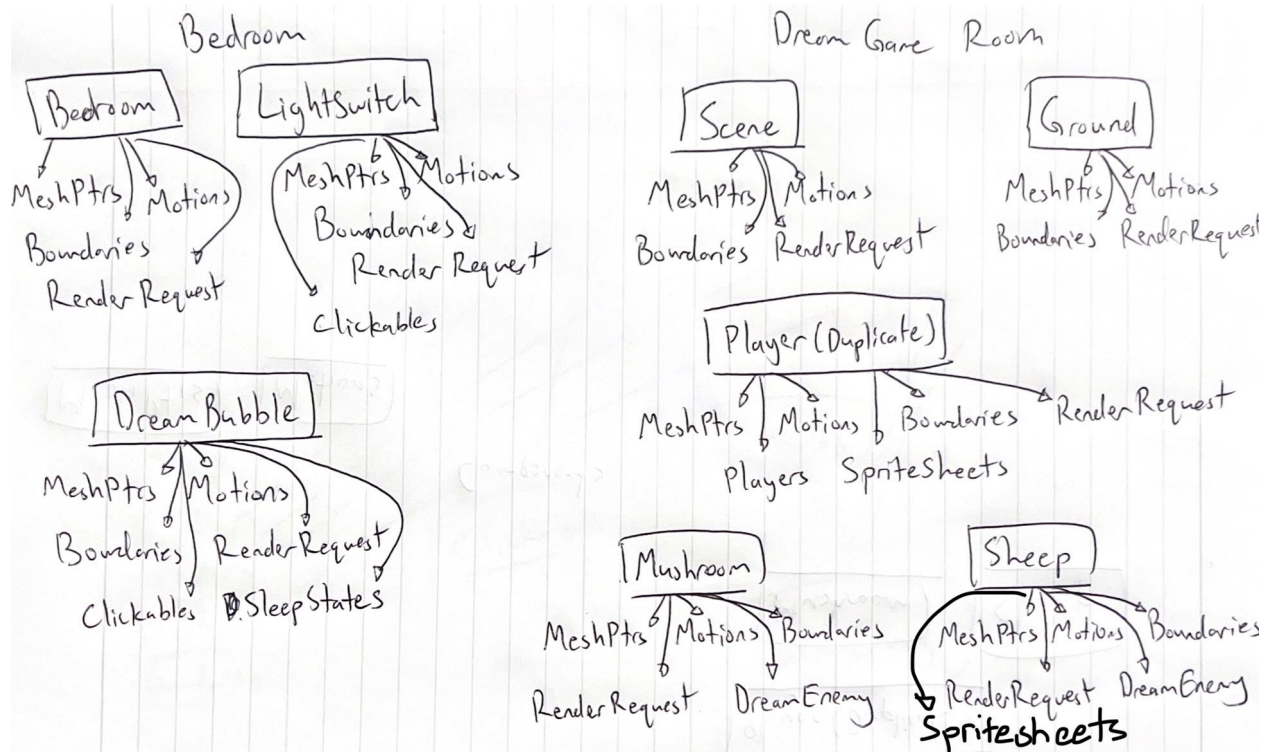
ECS design pattern diagram for the Kitchen Pancake Mini-Game.



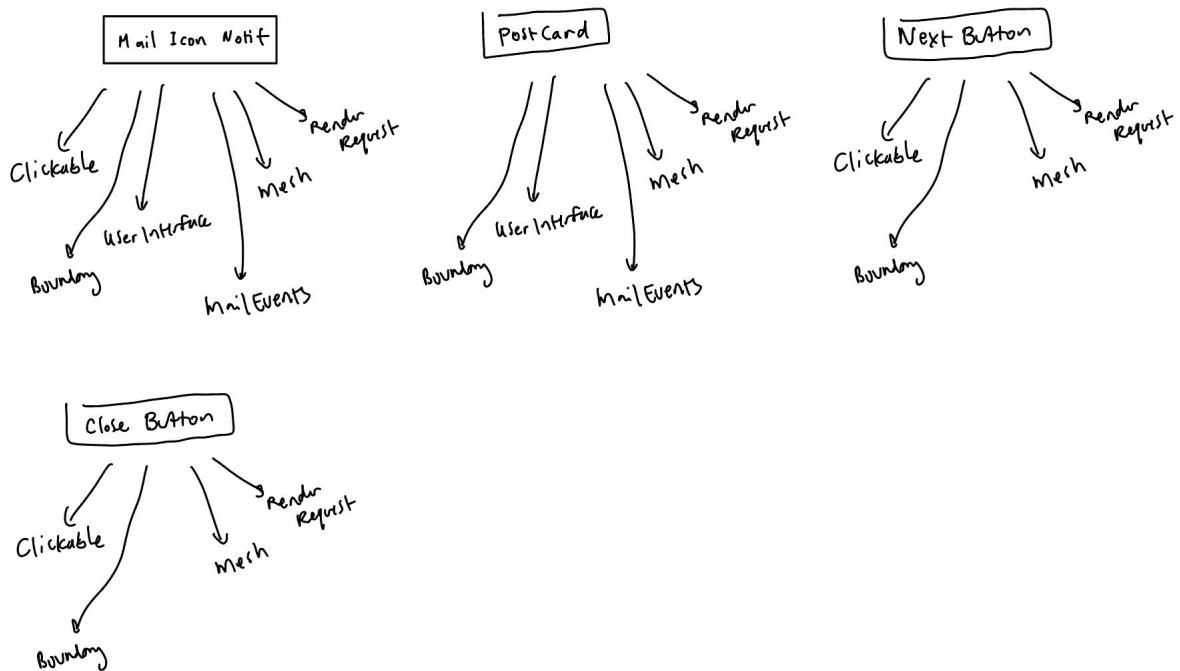
ECS Diagram for Backyard and User Help



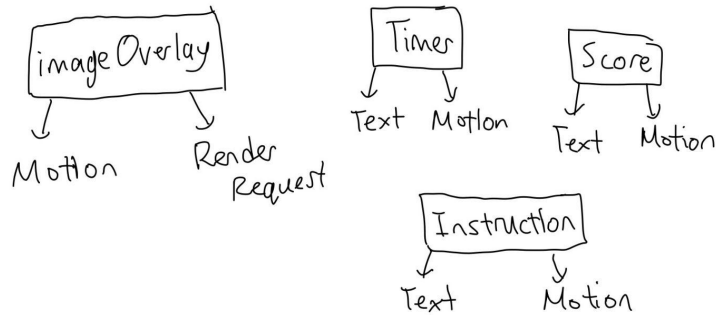
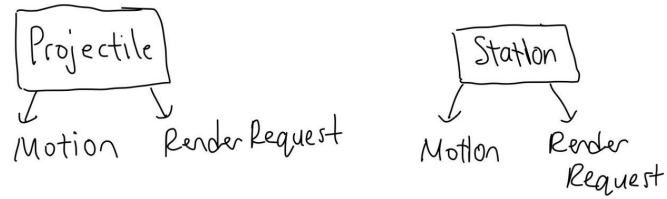
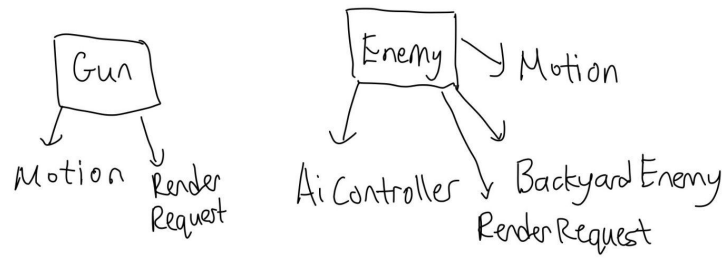
ECS Diagram for Bathroom and Health Bar



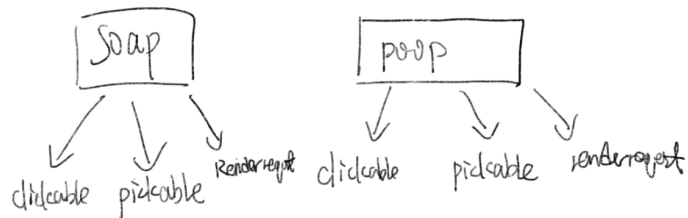
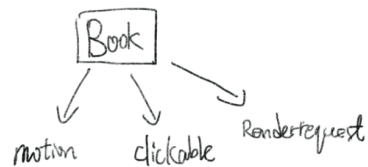
ECS Diagram for Bedroom and Dream Game Room



ECS Diagram for Mail System



ECS Diagram for BackyardGameSystem



ECS Diagram for Bathroom Mini Game