

# Sprint 3 Planning Meeting 02/22

## Summary

### Deadlines (Underlined = TBD, only a soft deadline)

- **02/22 @ 09:15 PM** - Team planning meeting for Sprint 3
- **02/22 @ 11:59 PM** - Plans for Sprint 3 layed out and posted in GitHub and ZenHub
- **02/24 @ Throughout Day** - Quick Scrum Meetings (All times are/were tentative)
  - @ 01:00 PM - Alek, Ben, Catherine, Eric
  - @ 04:30 PM - Alek, Ben, Eric, Tommy
  - @ 09:00 PM - Alek, Catherine, Eric, Ruidong
- **02/26 @ 11:59 PM** - Have code updated and templated/layed out
- **02/28 @ 10:59 AM** - Complete **Sprint 3 Code Review 1**
- **02/28 @ 09:30 PM** - Team code review meeting
- **03/02 @ 01:50 PM** - Have code in a finished state
- **03/07 @ 02:45 PM** - Latest date to have code reviewed in class by Kirby
  - After Kirby reviews work, set up an in person code session
  - Decide on date and time after selecting date for Kirby Review
- **03/09 @ 11:59 PM** - Finish code refactoring
- **03/10 @ 03:59 PM** - Complete **Sprint 3 Code Review 2**
- **03/10 @ 04:00 PM** - Team code review meeting and code connecting/finalization
  - Caldwell 177
- Have in person meetings/work done before March 11th

### Sprint 3 Focuses

#### Required

- Collisions
- Crouching
- Jumping
- Shell Object
- Background Objects
- 1-UP Mushroom Object
- Fix Fire Mario to be the only one who can throw Fireballs
- Level 1 and Developer Test Level Files
  - Developer Test Level should present all objects useable/available in the game
- **Code to load level files**
  - **Ask Kirby for more info/insight**
- New Commands

- LMB for previous level
- RMB for next level
- W for Jump
- A for Move Left
- S for Crouch
- D for Move Right
- 1 for Use Red Mushroom
- 2 for Use Fireflower
- 3 for Star
- 4 for 1-UP Mushroom
- StateMachine objects to handle objects' states
  - Koopa
  - Goomba
  - Mario
  - Shell
  - Block
  - Pipe
  - Flag
  -

## Extra Content

- Underworld Level/Room
- Flag animation
- Star Mario rainbow animation
- Player HUD
  - Score
  - Coins collected
  - World/Level Tracker
  - Time
- Interactable Features
  - Break bricks
  - Use coin block
  - Use question mark block
  - Collectable power ups
    - Red Mushroom, 1-UP Mushroom, Fireflower, Star
  - Flag
  - Pipe
- "Realistic Physics"
- Sounds
- Smooth camera transition
- Gamepad Controller

# Sprint 3 Classes/Interfaces Plans

- Interfaces
  - Update
    - IYMoveState - Adding crouching
  - Add
    - IStateMachine
    - ICollisionDetector
    - ICollisionHandler
    - ILevelLoader - Can this actually be handled in the GameState class?
      - Ask Kirby for insight
  - Remove
    - ICollideable - A different interface will be calling functions in objects, the objects themselves shouldn't have to know if they're collidable
- Classes
  - Update
    - YMoveState Classes - Adding crouching, Jumping may need updates
    - Shell - Already had the object, just need to update it to function
    - BackgroundObject - Already had object, need to update for function
    - Command Objects - Need to function in the way our keys will have to
    - Item - Needs to handle 1-UP Mushroom
    - GameObjectManager - Needs to be modified to initialize based on level layout rather than hard coded in
    - SpriteFactory - Needs to handle a 1-UP Mushroom
    - All Objects w/ States - Need to use StateMachine calls rather than states' calls, update functions will require the most changes
    - Mario Health State - Fix fireballs
  - Add
    - GoombaStateMachine
    - KoopaStateMachine - May combine with GoombaStateMachine if possible/makes sense
    - MarioStateMachine
    - ShellStateMachine
    - BlockStateMachine
    - PipeStateMachine
    - FlagStateMachine
    - LevelLoader - The GameState may be able to handle the level loading instead?
      - Ask Kirby for Insight
    - CollisionDetector
      - Passes the info the Handler that it gets from detection
    - CollisionHandler
      - Can pass on info for the objects that are colliding
  - Remove

- N/A
- Other Files
  - Level 1 - World 1 Game Data
  - Developer Test World/Level Data
    - Choosing XML files

Team Members and Their Assigned Tasks

Member Name	Alek	Ben	Catherine
Task(s) Assigned/Chosen	<ul style="list-style-type: none"> <li>- IStateMachine</li> <li>- StateMachines</li> <li>- YMoveStates</li> <li>- All Objects' State Handling</li> <li>- IYMoveState</li> </ul>	<ul style="list-style-type: none"> <li>- ICollisionHandler</li> <li>- CollisionHandler</li> <li>- Shell</li> <li>- BackgroundObject</li> <li>- Item</li> <li>- MarioHealthState</li> </ul>	<ul style="list-style-type: none"> <li>- ICollisionDetector</li> <li>- CollisionDetector</li> <li>- Commands</li> </ul>

Member Name	Eric	Ruidong Zhang	Tommy
Task(s) Assigned/Chosen	<ul style="list-style-type: none"> <li>- Shell</li> <li>- BackgroundObject</li> <li>- Item</li> <li>- MarioHealthState</li> <li>- Help on Collisions</li> </ul>	<ul style="list-style-type: none"> <li>- Shell</li> <li>- BackgroundObject</li> <li>- Item</li> <li>- MarioHealthState</li> </ul>	<ul style="list-style-type: none"> <li>- Level Loading Code</li> <li>- Level Files</li> <li>- GameObjectManager</li> <li>- SpriteFactory</li> <li>- ILevelLoader (If needed)</li> </ul>