

- **Issue:** Shrinking will continue even after attacking a building
 - Possible solutions: pause timer entirely after hitting building, add more time when hitting building, reset timer entirely when hitting building
 - Answer: totally reset timer upon hitting building, longer timer but shrink really fast
- **Issue:** Player can destroy bigger buildings really fast with their low attack delay at lower levels
 - Solution: make Player can only be able to damage buildings that are equal or less than their scale
- **Issue:** How to implement combo/dash mechanic?
 - Possible Solution: make individual delays for each attack? Too messy
 - Solution: Make class that holds a list of keycodes; can add keycodes for each attack made and check whether it is unique; list can hold 3 keycodes max; can make attack if keycode is unique, effectively ignoring the attack delay
 - Issue: reset means you can use the same attack twice instantaneously; need to require A DIFFERENT ATTACK for reset to apply
 - Solution: Check before attacking if key is unique; if it's not unique, don't make the attack but still add it to the list after clearing the list
- **Issue:** How is this combo mechanic going to interact with the player's normal attacks? Have a cooldown during which combo is not available to use? Make it rare? Make it time sensitive for key presses?
 - Solution: add cooldown, but also make it so player gets movement from normal attacks (REDUCE MAX MS)
 - **Design Change:** player doesn't get a "dash" from completing the combo, they just get to use the attacks' displacements faster
- **Issue:** how will shrunk players make a come back late game if there are only large buildings they can't hurt left?
 - Solution: just make smaller players deal significantly less damage to large buildings, and maybe increase min attack delay
 - Scale damage to scale diff if player is less than building scale
- **Design Choice:** more combo/fighting game based attack system, or just alternate punches and make them constant?
 - 1: alternate punches, kick is right mouse button;
 - Don't want to make this game boring; if you're just holding down a button what's the point?
 - 2: separate attacks like a fighting game, combos
 - Don't want to make this game boring; if you're just attacking buildings over and over again there's no big reason to require multiple button presses
 - 3: use both?
 - Holding down the button will repeat the same attack over and over again (move attack methods call to Attacks script?)
 - Just pressing the button will use a single attack
 - Can use combo once when it's off cooldown
 - Chose to go with this! Simpler for player while allowing combos

- **Issue:** combo continues if you use the same key twice (key is just replaced with the same key)
 - Solution: Break combo, so you have to start it over again (Combo starts every other attack) but retain attack delay; just clear list when adding same attack and implement thing below:
 - Make first attack recorded in combo have attack delay, aka return false when adding to ComboList
- **Design Choice:** Make combo time sensitive?
 - Could make it last forever so you can complete it at the ideal time
 - Downside: player might accidentally use combo
 - Upside: chance of surprising other player
 - Could make it time sensitive
 - Downside: Harder to implement
 - Upside: Less of a random chance for player to activate it
- **Design Choice:** Scrapped idea of players getting cash from destroying buildings in favor of player's accruing dollars in property damage as points
 - Cash would give players the idea they can spend it on something like powerups; in this type of game, I don't think players should get a choice of what power ups they get in the middle of the action
 - If one power up is superior to the others, a meta will quickly develop; I prefer powerups to be randomly placed around the map
- **Issue:** player can make multiple attacks at the same time
 - Current solution establishes a priority for attacks
 - Idea: make it so that player starts attacking with new attack type if another button is pressed
 - Cache the first or second attack button?
 - Solution (8/3/21): added a modified priority for attacks
 - Unity does not make it easy to get the current key pressed
 - to simplify things, I just added a priority of kick > left punch > right punch, but kick can only be used once per key press and does NOT REPEAT if its attack button is held down
- **Issue:** player attack behavior is extremely hard coded in
 - ~~ABSTRACT ATTACKS A BIT MORE SO YOU DONT HAVE TO HARD CODE IN ATTACK BUTTONS FOR CERTAIN ATTACKS but attacks are hardcoded (do this after the caching thing)~~
 - ~~A map or hashmap would probably be useful~~
 - ~~Attack keys to retrieve strings representing attack functions~~
 - ~~Attack map that has a hash map under the hood with three public fields for attack keys that get mapped to the associated attack names~~
 - ~~Wrapper classes are not~~
 - ~~Can use invoke() to call the associated attack method for the attack key~~
 - Solution (8/3/21): just added public keycode fields to attacks script with variable names associated with matching attack names; a map was unnecessary for this behavior

- Takeaways: simple design can be much better for behavior like this; I tend to overcomplicate some things