Issues/optimization:

-crashes when swapping player to other team

-should try to fix mccree being able to interrupt his ult by firing. not sure if his voice line would still play if I just stunned or froze him shortly afterwards. Then again maybe it's okay to leave it as is?

-~~if mccree cancels his ult manually, the description text won't be removed, also seems to happen if he just doesn't fire. Though I'll probably make a new way of showing the ult descriptions in the future with a manual button press. edit: apparently the code currently checks for if the enemy players have ulting enemy mccree set when disabling the ult, so if enemy team is empty then the ult text will never be removed, will modify~~

-~~multiple mccrees per team don't apply damage correctly as the code is only designed for one per team~~ edit: probably fixed now, because I changed the damage to be applied on mccree’s side

-roadhog and maybe some other stuns can cancel d.vas freezing when choosing from menu edit: should maybe be fixed now?? added temporary phased out status slightly before freezing into the menu although in testing it seemed like there was some very brief window where a roadhog was able to hook you anyway, but I couldn't reproduce it.

-checking for ability 2 cooldown always returns 0 with dva which is why the cooldown for her microrockets isn't changed, could potentially use the hard value from the wiki for the cooldown and then calculate based on that and also do the cooldown reduction a specific number of seconds after she started firing the rockets, but might have to set some extra variables for that or use d.vas array variable, or maybe the devs will fix it eventually who knows

-sigma code sometimes leaves allies flying, also several sigma rules related to him setting gravity on players executing even when there hasn't been any sigma playing, some of sombra’s rules run unnecessarily as well

~~-sombra's time stop doesn't seem to work on players if they spawn during the time stop~~ edit: setting is alive as a condition seems to have fixed this.

-could maybe remove some unnecessary variables from use like ones used for timers and such

-soldier can use multiple killstreaks at once if they're unlocked, also can use other streaks when in ac-130 for example

-~~seems like sometimes the number of kills counted by the game for soldier's streak is more than the amount counted by the code?~~ edit: Might have been because I was only counting final blows and not eliminations before

-nuke increases respawn time for bots? and maybe players?

-sometimes zarya's graviton effect doesn't get removed after ult ends and just gets placed in the middle of the map

-torbturret disappears when AI bots are added to the same team, dunno if the same would happen with dummy bots and players, edit: seems like the torb maybe just gets replaced on his slot instead of being moved up a slot. Probably should have to specify a slot that is not used by players or AI.

-winston's wall stun seems to work most of the time, but sometimes it doesn't, seems like the J variable might not be set correctly sometimes when winston deals damage?

-for some reason with zarya the enemies are now flying in long circles around the grav when I reworked the code even though functionally I don't see how it should be any different from before

-sometimes junker queen doesn’t get teleported back from arena. Also gravity doesn’t get applied correctly sometimes

-seems like player dealt healing only works on players who actually have lost health now so Mecy can’t give life to full health players and I suppose this would break Ana’s ult too.

-sigma’s gravity changes sometimes persist despite sigma not being near. Seemed to break one time when I tried swapping him to spectators and back, but then the same didn’t happen again later.

-Sometimes it seems like the variables are changed, but the gravities don’t get applied in time before the variable changes again. Probably should try to set the gravities at the same time as the variables are changed, tried a solution for that but it seemed kinda buggy and there was a ton of arrays to go through which may have caused some issues. Maybe could just be simplified by removing the whole currentgravities and speeds thing

-genji’s ult’s damage over time seems to interrupt if he uses ultimate again before the last damage over time has finished and the enemies are still stunned

-should maybe make sure that allies can’t heal the nanoboosted player to full in between ana applying the damage to them and healing them with ult. From what I could tell with AI mercy’s it seemed like it worked even if their healing beams were active but not a 100% sure

Stuff to add/change:

-add visual effect to roadhog reflecting stuff

-maybe somehow stop symmetra from spawning portals out of bounds

-maybe enable reaper's guns, but just teleport him out of bounds if he stays there while not in wraith form, edit: for some reason I remember having had reaper teleport in bounds after ult ends, but apparently that's not in there.

-could maybe try using resurrect with brigitte instead of changing hero edit: tried it, didn't seem to work as far as I could tell although I'm not a 100% sure I did it correctly

-maybe with zenyatta could create a dummy bot that copies their moves while the actual possessed player is invisible so that the zenyatta can damage their allies, or maybe the zenyatta himself could transform into the enemy hero. Could use force player outline or whatever that is to still make the zen look like an ally.

-problem with this solution is that the skin might be different for the character between players

-could maybe do the whole thing in a sort of opposite way where the zenyatta just turns into the enemy hero and instead of zen's camera seeing the enemy's perspective, the enemy sees zen's perspective during the possession and the enemy is invisible and phased out like zen is right now. This way I actually wouldn't even have to replicate the move-set like the code currently does. And this way the zen possessing could damage the enemy's team.

-maybe a dummy bot would be the best solution so that the zen player won't take all the damage, although maybe that's not necessarily too bad

-could potentially use projectiles with widow's ult to get more accurate hits?

-could maybe add a secondary fire to the ac-130

-could maybe come up with something else for Ana. Soldier's care package already sets cooldowns to 0 edit: probably gonna add speed boost, ult charge and jump boost

-for tracer could maybe speed up projectile speed to make it like made in heaven lol

-maybe add some kind of global array that keeps track of all effects and destroys them if the player leaves the match or something or after a certain amount of time

-could maybe use is true for any to check if any of the enemy players has variable set and then set stuff on the event player

-add dummy bot checks for all ults

-should maybe set pharah's hud text during ult into a variable so it is deleted correctly

-for junker queen could make the cooldown reduction change based on the amount of wins too

-could maybe make baptiste’s amplification matrix do half damage or no damage from enemies that shoot through it, or would that be too weak, or maybe could spawn multiple matrixes with dummy bots that stack?

-maybe move comments from workshop.codes to here since they don’t get copypasted over from compiling

-junker queen adds new health pools and damage modifications when using her ult. Could maybe just add one then change its values.

-could maybe make lucio’s ult more supportive, maybe add more temp health when the beat drops though you can only add so many health pools at a time. Could also maybe just do the emoting thing.

~~USING THE CURRENT GRAVITIES CODE DOESN’T NECESSARILY HELP ALL THAT MUCH RIGHT NOW SINCE I WAS SETTING GRAVITY JUST STRAIGHT TO ZERO WITH MANY ABILITIES ANYWAY SO IT’S NOT LIKE YOU NEED TO ADD OR SUBTRACT THAT MUCH AND YOU’D STILL PROBABLY HAVE TO REAPPLY THAT ZERO GRAVITY FOR SOMETHING LIKE PHARAH’S ULT IF SHE ENTERS AND LEAVES SIGMA’S GRAVITY ZONE. COULD POTENTIALLY DO THE ZERO GRAVITY BY SUBTRACTING GRAVITY AS WELL OR JUST GET RID OF THE CURRENT GRAVITIES AND SPEEDS AND JUST MAYBE ADD SOME CONDITIONS WHEN GRAVITIES ARE BEING APPLIED DURING DIFFERENT ULTIMATES~~

Usingcustomult subroutine, might need to remove some stuff from it that doesn't affect all heroes with custom ults:

Destroy Effect(Event Player.UltEffect);

Event Player.UsingCustomUlt = null;

Destroy HUD Text(Event Player.UltReadyText);

Event Player.UltReadyText = Null;

Set Ultimate Ability Enabled(Event Player, True);

Event Player.B = Null;

Stop Chasing Player Variable(Event Player, G);

Event Player.G = 0;

Destroy HUD Text(Last Text ID);

Set Primary Fire Enabled(Event Player, True);

Set Secondary Fire Enabled(Event Player, True);

Set Damage Dealt(Event Player, 100);

Set Max Health(Event Player, 100);

Destroy Effect(Event Player.Y);

Event Player.Y = 0;

Stop Camera(Event Player);