

3b. Requirements - New Use Case Description 2: Choose difficulty and play game with that difficulty

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Primary Actors	Human players
Stakeholders and Interests	Human players, Developers, Testers
Preconditions	<p>We have decided for our difficulty system we are going to implement a countdown timer that forces the human player to place a piece during the given amount. The amount of time decreases as the difficulty increases.</p> <p>Preconditions for implementing this difficulty system are:</p> <ol style="list-style-type: none">1. The program is started and running as intended. Also a functional main menu is present.2. The user has selected the new game screen and chosen the human and cpu player count.3. The user can see the difficulty options and how those options change the round time. Then they choose the difficulty that they would like to play with.4. The timing system code has to be properly functioning. Meaning that the initial time for each turn will be displayed for a turn and counts down once that turn has started.
Postconditions	<ol style="list-style-type: none">1. The next players turn has started and the timer has started to count down again.2. The rest of a match can be played with the timing system functioning properly depending on the difficulty shown.3. Turn change functions properly depending on if the player successfully placed a piece or not during their turn.
Main Success Scenario	<ol style="list-style-type: none">1. The medium difficulty has been selected and the user selects start game.2. The first players turn begins and the initial round time is displayed as a timer on the game board.3. The round time starts to count down while the player is choosing their piece and where they would like to place it (see place a piece use case)4. The timer has not reached 0 before the player has found a spot and placed their piece.5. The game moves to the next player and the timer is reset to the initial turn time value.

Alternative Flows	<p>1. The user has not placed their piece before the round timer counted down to 0. This forces the player to end their turn without placing a piece or gaining any points. The game then moves to the next player and the time is reset to the initial time.</p> <p>2. The user has selected easy difficulty. In this case the round time is 60 Seconds and the player has as much time to think without time pressure and the risk of their turn ending.</p> <p>3. The user has selected hard difficulty. In this case the allowed round time is half of the allowed time for medium difficulty.</p>
Exceptions	<p>1. The round time runs out but the game doesn't change active player properly.</p> <p>2. The time doesn't reset with the new players turn.</p> <p>3. The timer is not displayed properly.</p> <p>4. The timer doesn't count down properly</p> <p>5. The round time does not match up with chosen difficulty (such as medium having unlimited time)</p>
Special Requirements	<p>One second on the timer corresponds to one second in real time.</p>