

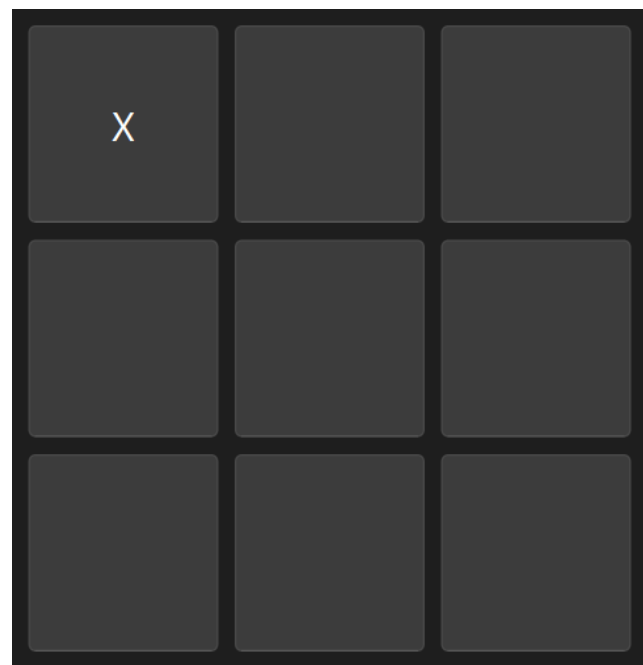
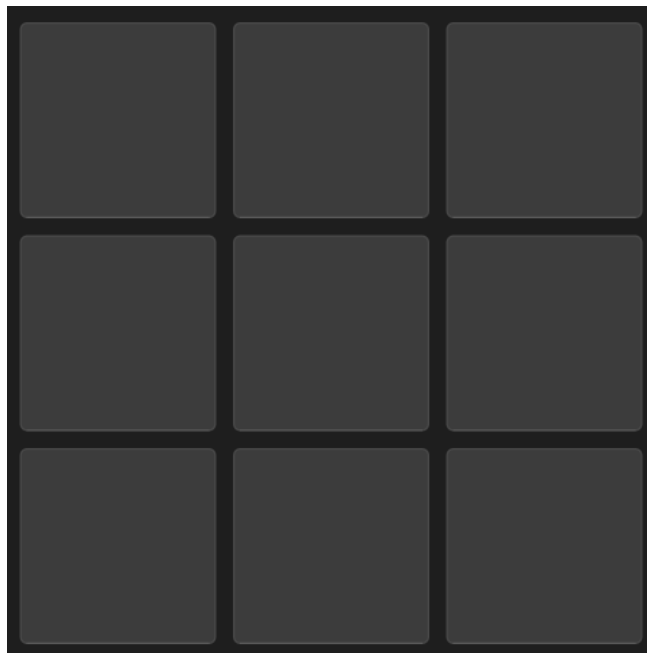
Time of Response

Code Snippet:

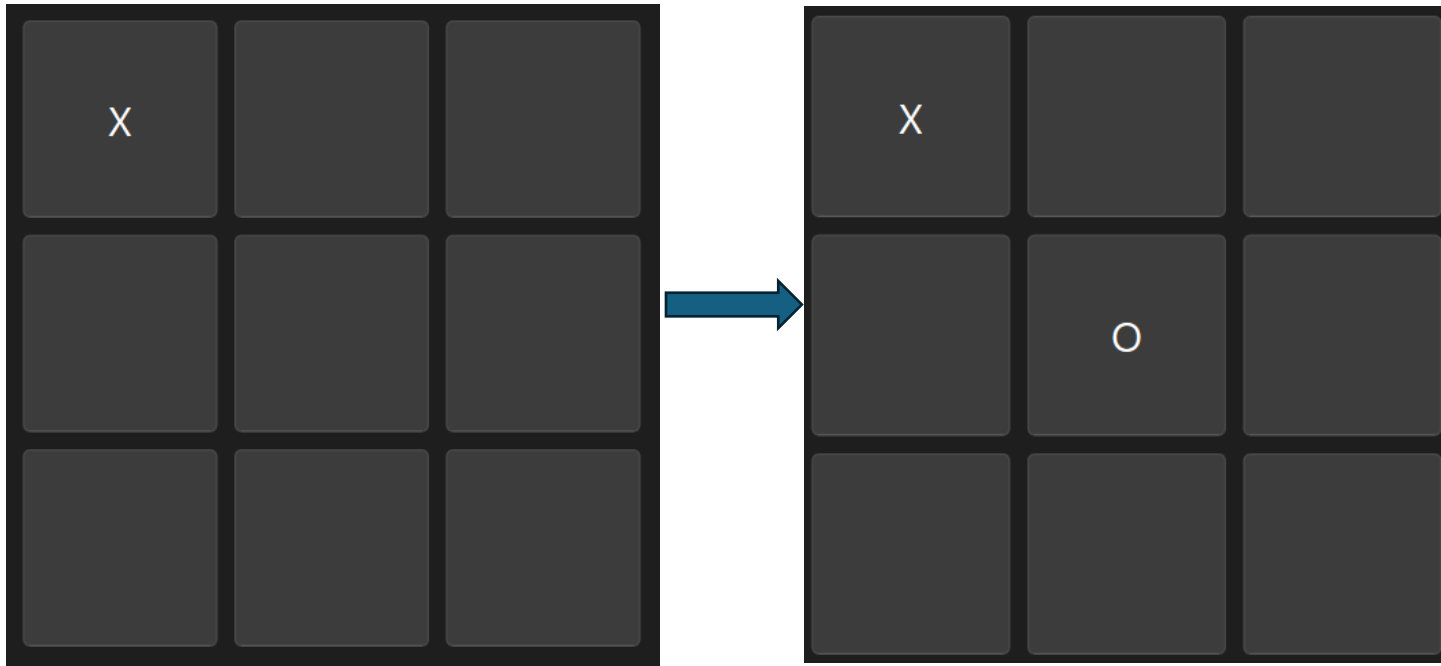
```
auto start = std::chrono::high_resolution_clock::now();  
buttons[row][col]->setText(QString(symbol));  
auto end = std::chrono::high_resolution_clock::now();  
std::chrono::duration<double> elapsed = end - start;
```

First Execution time is the time between pushing the button and appearing the Symbol

```
Execution time: 9.6e-06 seconds
```



Second Execution time is the respond time of Ai to play it's turn

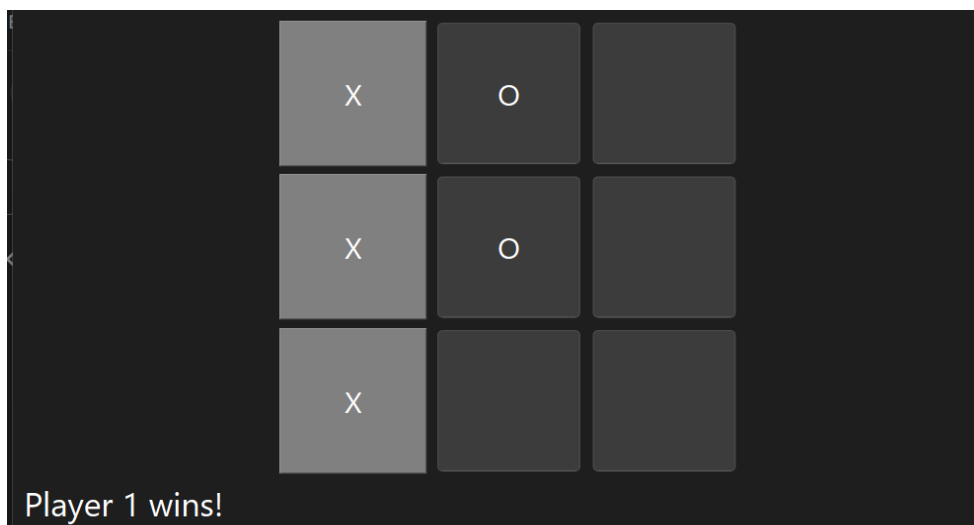


Execution time: 6e-06 seconds

Code Snippet:








```
updateBoard(row, col); for (char c : {'X', 'O'}) {  
    auto start = std::chrono::high_resolution_clock::now();  
    if (checkWin('X')) {  
        QFont font = statusLabel->font();  
        font.setPointSize(20); // Set the desired font size  
        statusLabel->setFont(font);  
        statusLabel->setText("Player 1 wins!");  
        auto end = std::chrono::high_resolution_clock::now();  
        std::chrono::duration<double> elapsed = end - start;  
        qDebug() << "Execution time: " << elapsed.count() << " seconds\n";  
    }  
}
```

third Execution time is the time which program take to determine who's the winner



```
Execution time: 0.0011553 seconds
```

memory usage and CPU utilization

>	 tuc	0%	23.4 MB	0 MB/s	0 Mbps
>	 tuc	0.1%	22.6 MB	0.1 MB/s	0 Mbps
>	 tuc	0.1%	22.9 MB	0.3 MB/s	0 Mbps
>	 tuc	0.6%	23.6 MB	0.1 MB/s	0 Mbps
>	 tuc	0.1%	23.4 MB	0 MB/s	0 Mbps
>	 tuc	0.2%	23.4 MB	0 MB/s	0 Mbps
>	 tuc	0.3%	23.4 MB	0 MB/s	0 Mbps