

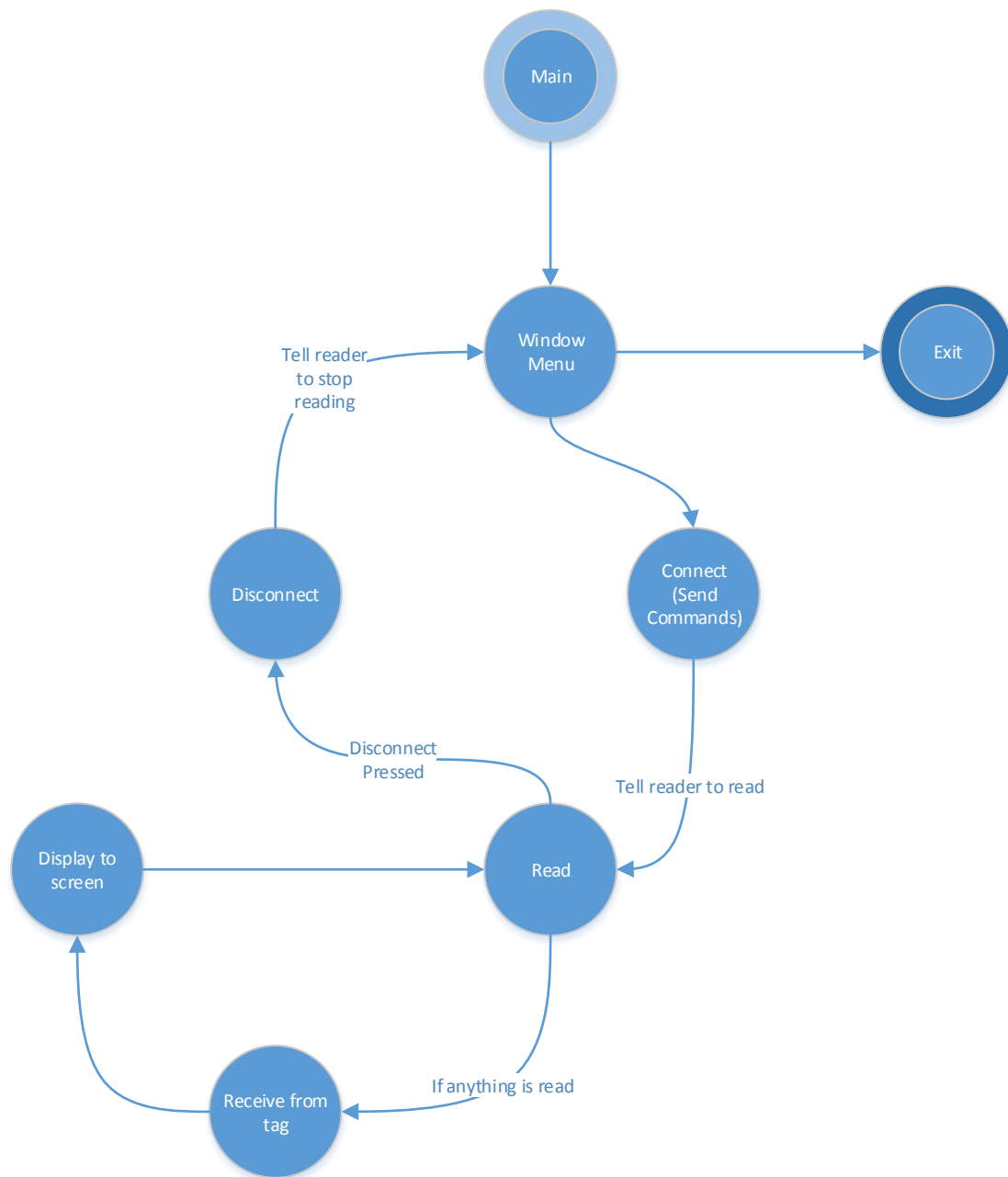
## Question from the PDF:

? Provide a brief explanation of what you observed when working with different types of tags and the effective range of each one.

We found that certain tags had a larger range compared to other tags. The tags that were larger seemed to have a larger reading range, while the smaller tags were not as easily read or distinguished.

We also found that when multiple tags were placed, the larger tags would be read before the smaller tags and the larger tags were read on an average more than the smaller tags.

## Design



## Pseudo Code

### Main Function

```
{  
    Initialize variables  
    Create window()  
}
```

### Display Window Menu Function

```
{  
    Create connect button  
    {  
        if pressed, Call DetectMode() - EVENT  
        change state to true  
    }  
    create exit button  
    {  
        close threads  
        exit the program  
    }  
    Create disconnect button  
    {  
        If pressed, close serial port  
    }  
}
```

### Detect Mode (Event)

```
{  
    Open the serial port  
    GetCommSettings  
    Set Comm Settings  
    if tag is detected and status is true  
    {  
        create send thread (SendCommand())  
    }  
}
```

### Send Command

```
{  
    Send command to tag  
    call receivefromtag()  
}
```

Receive from tag

```
{  
    Get data from tag  
    Call DisplayCharacters()  
}
```

Display Characters

```
{  
    Display characters on window  
    close thread  
}
```

Disconnect Mode

```
{  
    Close the serial Port  
    Change the state to false  
    Close event/threads  
}
```