

```
// This struct is the main component of the Enigma machine which combines the other components
// required to encode or decode messages.
```

```
type EnigmaMachine struct {
    plugboard Plugboard
    reflector Reflector
    rotorSet RotorSet
}
```

```
// Plugboard allows swapping of characters before they are processed by the rotors. It has a
// 'connections' map which maps one character to another, indicating which characters are swapped.
```

```
type Plugboard struct {
    connections map[rune]rune
}
```

```
// Reflector represents the fixed reflector.
```

```
type Reflector struct {
    wiring [26]int
}
```

```
// This struct represents a single rotor of the Enigma machine. It has a wiring array which contains the
// mapping of input characters to output characters, a notch rune which indicates when the next rotor
// should be rotated, a position rune which indicates the current position of the rotor.
```

```
type Rotor struct {
    wiring []rune
    notch rune
    position rune
    ringSetting rune
    turnover rune
    turnoverFlag bool
}
```

```
}
```

```
// RotorSet represents the set of three rotors that make up the rotor mechanism of the machine.
```

```
type RotorSet struct {
```

```
    leftRotor Rotor
```

```
    middleRotor Rotor
```

```
    rightRotor Rotor
```

```
}
```

```
// InputRotor represents a rotor that is used for input. Also, it is used to allow the operator to specify the
```

```
// initial state of the rotors before encoding or decoding a message.
```

```
type InputRotor struct {
```

```
    wiring []rune
```

```
    position rune
```

```
}
```