

# Lab Lexer-3

## **Antlr**

### Lexer form

```
/** Optional javadoc style comment */
[parser|lexer] grammar Name; // indicate `parser` or `lexer`
options {...}
import ...;

tokens {...}
channels {...} // lexer only
@actionName {...}

ruleName1 : alternative1 | ... | alternativeN ; // parser and lexer rules, possibly intermingled ...
ruleNameN : alternative1 | ... | alternativeN ;
```

only lexer grammars can contain mode specifications and custom channels

```
channels {
  WHITESPACE_CHANNEL,
  COMMENTS_CHANNEL
}
WS : [ \r\t\n]+ -> channel(WHITESPACE_CHANNEL);
```

#### Useful lexer rules

#### **Tokens Section**

```
tokens { Token1, ..., TokenN }
```

#### **Actions**

#### **Named Actions**

```
header and members
```

## **Modes**

```
rules in default mode
...
mode MODE1;
rules in MODE1
...
mode MODEN;
rules in MODEN
...
```

### **Commands**

- skip
- more
- popMode
- mode(x)
- pushMode(x)
- type(x)
- channel(x)