

- \* Consumer is the most basic unit of Channels code.
- \* Consumers consumes event, following the routing table.
- \* Basic consumer has three elements:  
Connect, receive, disconnect
- \* Each protocol has different kind of event, and each type is represented by a different method  
We need to write code to handle each event

## Elements of Scope & Channel layer in Consumer

1. `self.scope["url-route"] ["kwargs"]  
    url-part`

\* Obtains the variable from the url that is requesting to this consumer.

\* `self.scope` contains information about the connection.

2. `async-to-sync(self.channel_layer.group_add)(.....)`

\* joins a group

\* The `async-to-sync` wrapper required because `WebSocketConsumer` is synchronous but it is calling asynchronous `channel-layer` method

Note: All channel layer methods are asynchronous

\* Group names are restricted to ASCII alphanumerics, hyphens, & periods.

3. `self.accept()`

\* Can only be called in `connect()` method of `consumer`

4. `async-to-sync(self.channel_layer.group_send)(.....)`

\* Sends event to group

\* Event has special `type` key corresponding to the name of the method within the consumer handling the event.

Note: Replace `_` with `.` in function name. Eg. `chat_message` to `chat.message`.