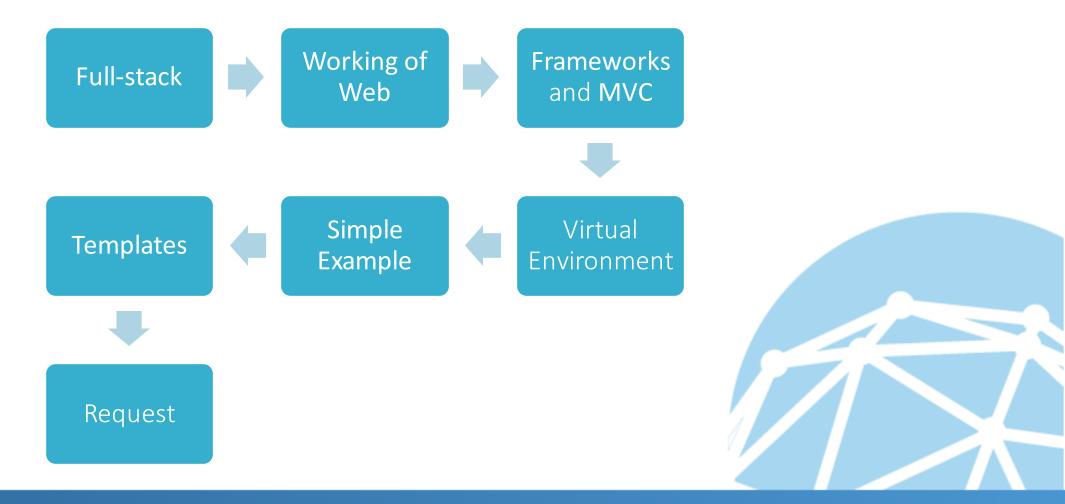
# DAY 3

**Intro to Web Programming with Flask** 

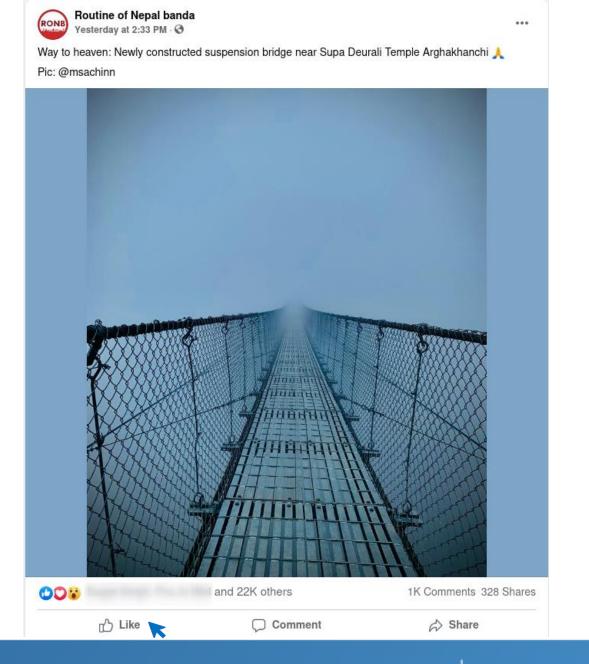
## Road Map



# Full-Stack = Front-End + Back-End



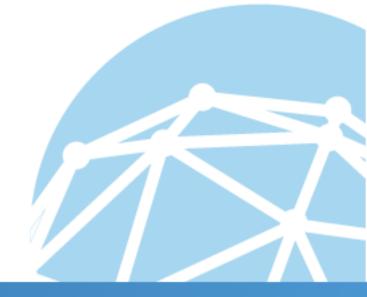
















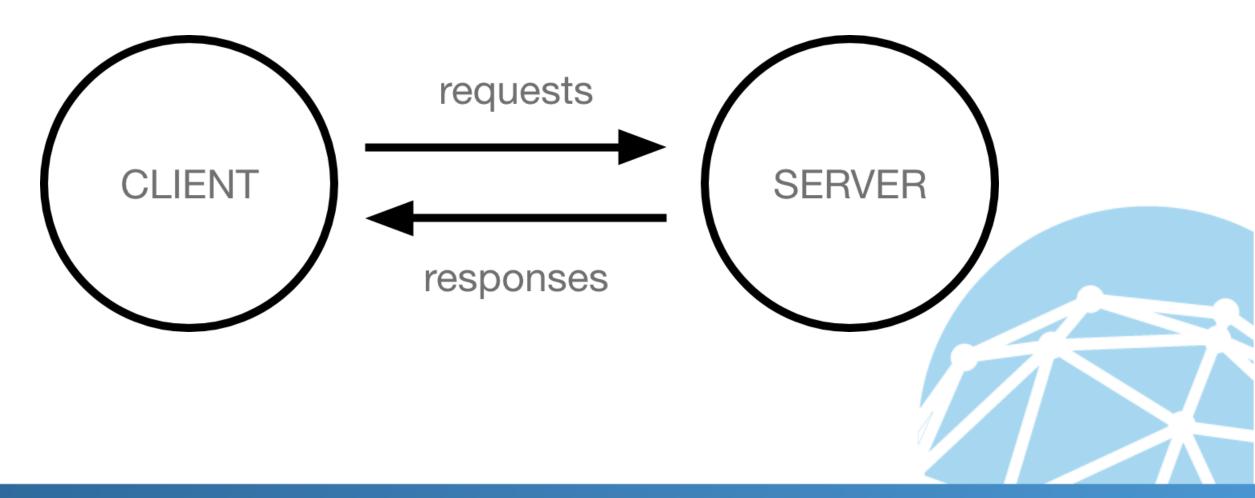




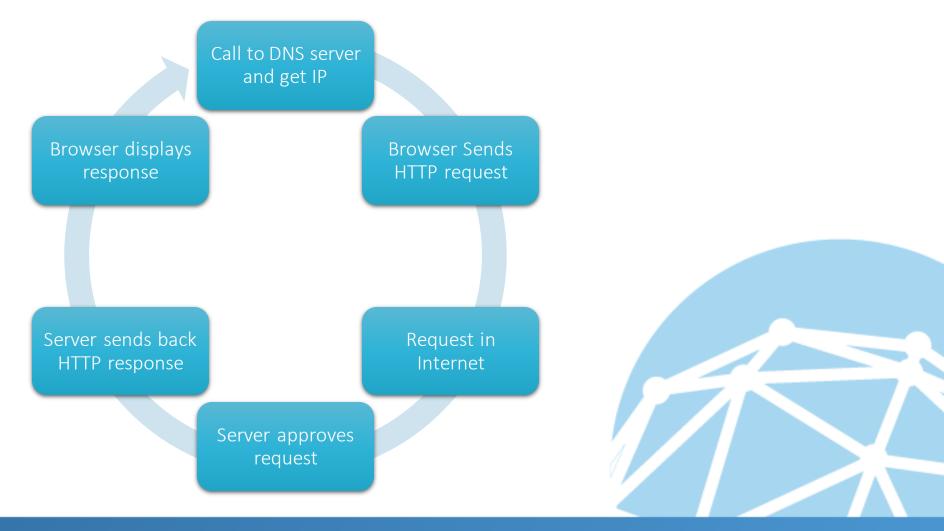
Cupboard Front House Kitchen

Front-End Server Database

#### How does web work?



## Request Response Cycle





#### HTTP Request

```
> GET / HTTP/1.1
> Host: www.google.com
> User-Agent: curl/7.68.0
> Accept: */*
>
```

#### HTTP Response

```
< HTTP/1.1 200 OK
< Date: Wed, 07 Jul 2021 12:37:10 GMT
< Expires: -1
< Cache-Control: private, max-age=0
< Content-Type: text/html; charset=ISO-8859-1
< Content-Type: text/html; charset=ISO-8859-1</pre>
```

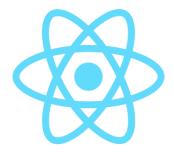




#### Frameworks















# They Handle low level works

**We**Create application logic





## Why to use them?

Fast development

Secure code

Prevention of duplication

Increased reliability

Easy to test and Debug



# **MVC Pattern**

What is a pattern?

#### Pattern

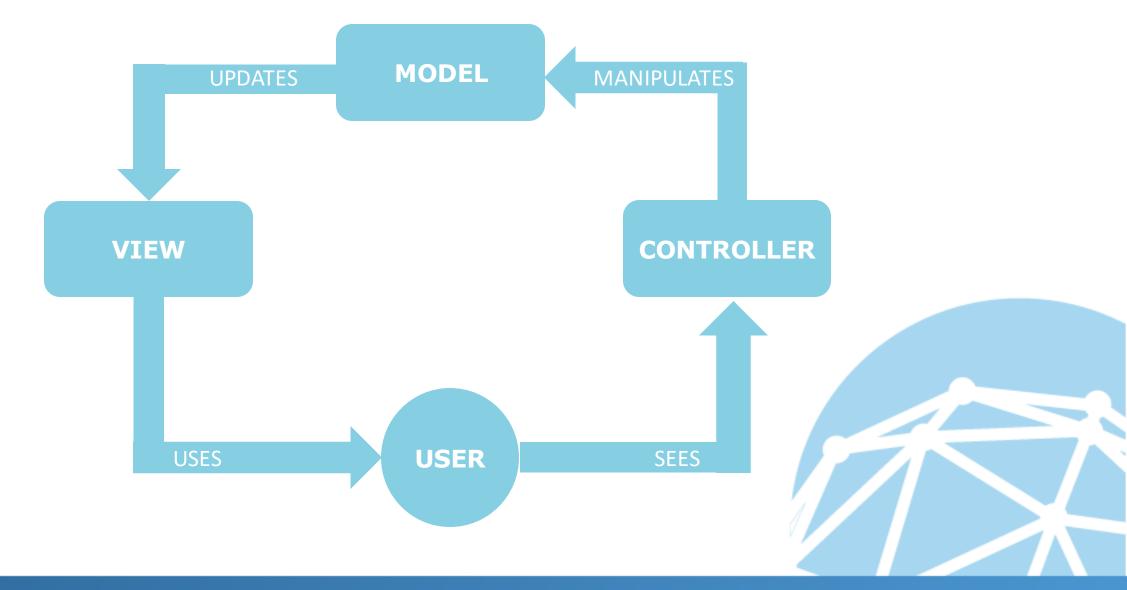
**Reusable Solution** 

Solves common problems

Not a code







Let's do some tasks.

#### Virtual Environment

- Isolated Python interpreter, libraries and scripts
- A directory tree keeps all the dependencies
- No clash of dependencies



#### Routes

```
from flask import Flask

app = Flask(__name__)

@app.route('/')
def index():
    return "Hello World"
```

The destination for a client request in the server

{url} /path/to/destination



#### Controller Function

```
from flask import Flask

app = Flask(__name__)

def index():
    return "Hello World"

from flask import Flask

app = Flask(__name__)

return "Hello World"

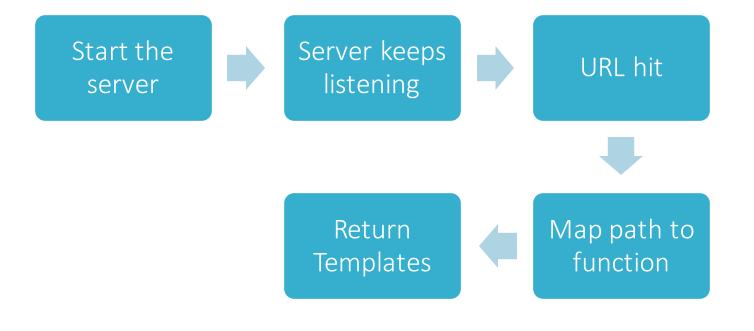
generated the state of th
```

- Mapped function to given route
- Business Logic





# App Workflow







### Templates

Presentation Logic

Just HTML files?

More powerful with Templating Engine **Jinja** 





# What is rendering?

Attach arguments to HTML passed from controller function





### Methods

GET	POST
Access resource from the server	Submit something to cause some change in server.
Visible in URL bar	Packed within request



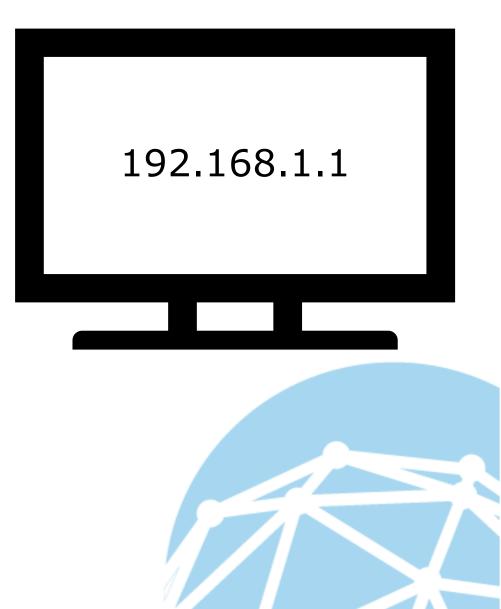
# Thank You

#### IP Address

4 numbers separated by a dot(.)

Address of the device in internet

Unique Identifier





#### **Domain Name**

Human Readable Format

Indicates address

Unique

