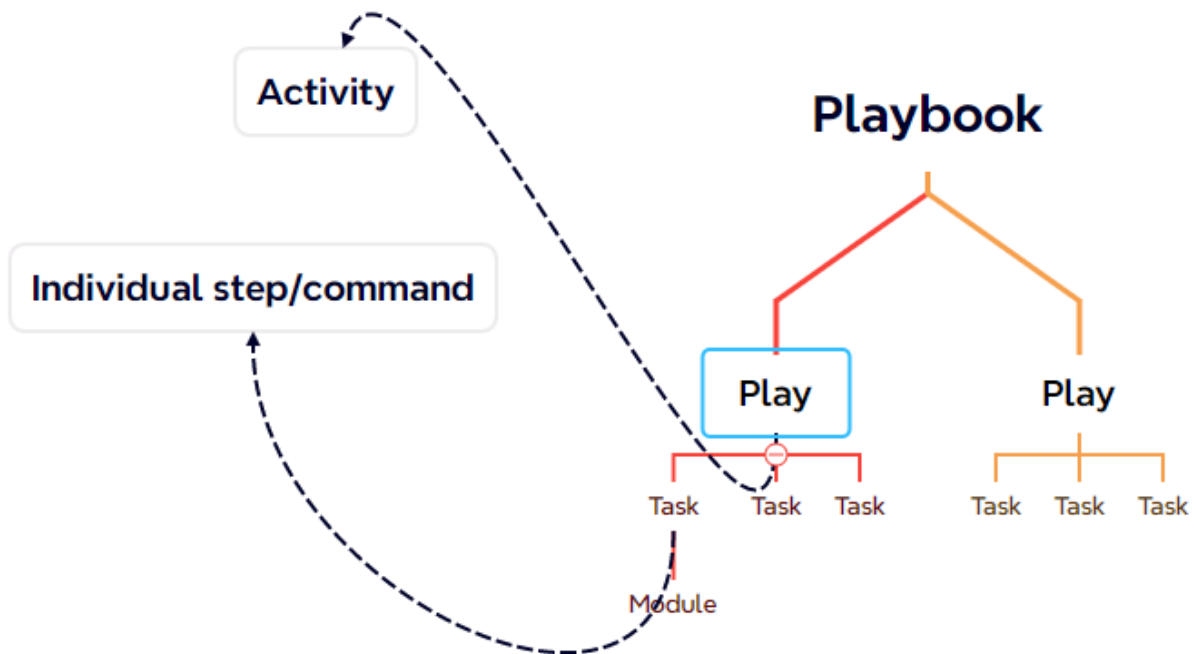


Ansible Playbooks

- Ansible Playbooks are used to express the desired state.
- In Ansible Playbooks have a specific structure



- Playbook is collection of Play. Each Play is collection of Tasks (Handlers, roles).
- Generally Play represents the activities such as webserver installation, database installation etc...
- Task represents individual steps, Tasks take the help of modules to achieve the functionality.
- In Ansible modules are smallest unit of work.
- Ansible module list [Refer Here](#)
- Ansible can be used in two approaches
 - Adhoc Commands:
 - In this we construct commands
 - For non repetitive or experimenting modules we can use adhoc comands.
 - Playbooks:
 - In this case we create a yaml file which describes the desired state.
 - In the case of automations or repetitive executions its recommended to use Playbooks as we have history of changes and also embraces DRY (Dont Repeat Yourself)

Ways of Working in Ansible to create Playbooks

- List out the manual steps and ensure that they work

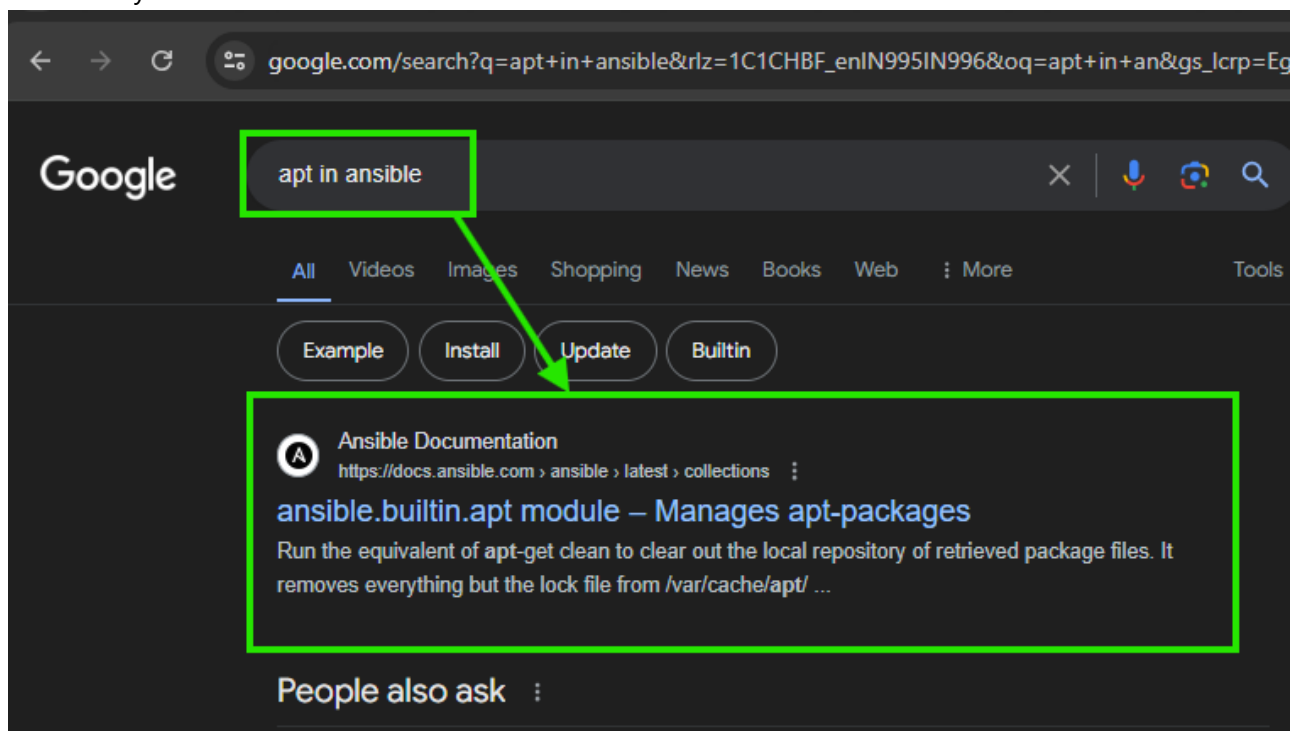
- For each manual step try finding a module and express in playbook

Trying Ways of Working

- Activity: Install nginx and deploy a website <https://www.free-css.com/assets/files/free-css-templates/download/page295/makaan.zip> for real estate.
- Working Manual Steps:

```
sudo apt update
sudo apt install nginx -y
cd /tmp
wget https://www.free-css.com/assets/files/free-css-templates/download/page295/makaan.zip
sudo apt install unzip -y
unzip makaan.zip
sudo mv real-estate-html-template/ /var/www/html/makaan
```

- For each step try finding a module
- Easiest way to find module is



- Playbook

```
---
- name: Deploy makaan into nginx
  become: yes
  hosts: all
  tasks:
    - name: update and install nginx
      ansible.builtin.apt:
        name:
```

```
    - nginx
    - unzip
    update_cache: yes
    state: present
  - name: download website tempalte
    ansible.builtin.get_url:
      url: https://www.free-css.com/assets/files/free-css-
templates/download/page295/makaan.zip
      dest: /tmp/makaan.zip
  - name: unzip the website
    ansible.builtin.unarchive:
      src: /tmp/makaan.zip
      dest: /var/www/html
      remote_src: yes
  - name: rename the directory
    ansible.builtin.command: mv /var/www/html/real-estate-html-template
/var/www/html/makaan
  - name: restart nginx
    ansible.builtin.systemd:
      state: restarted
      name: nginx
```

- YAML Tutorial: [Refer Here](#)