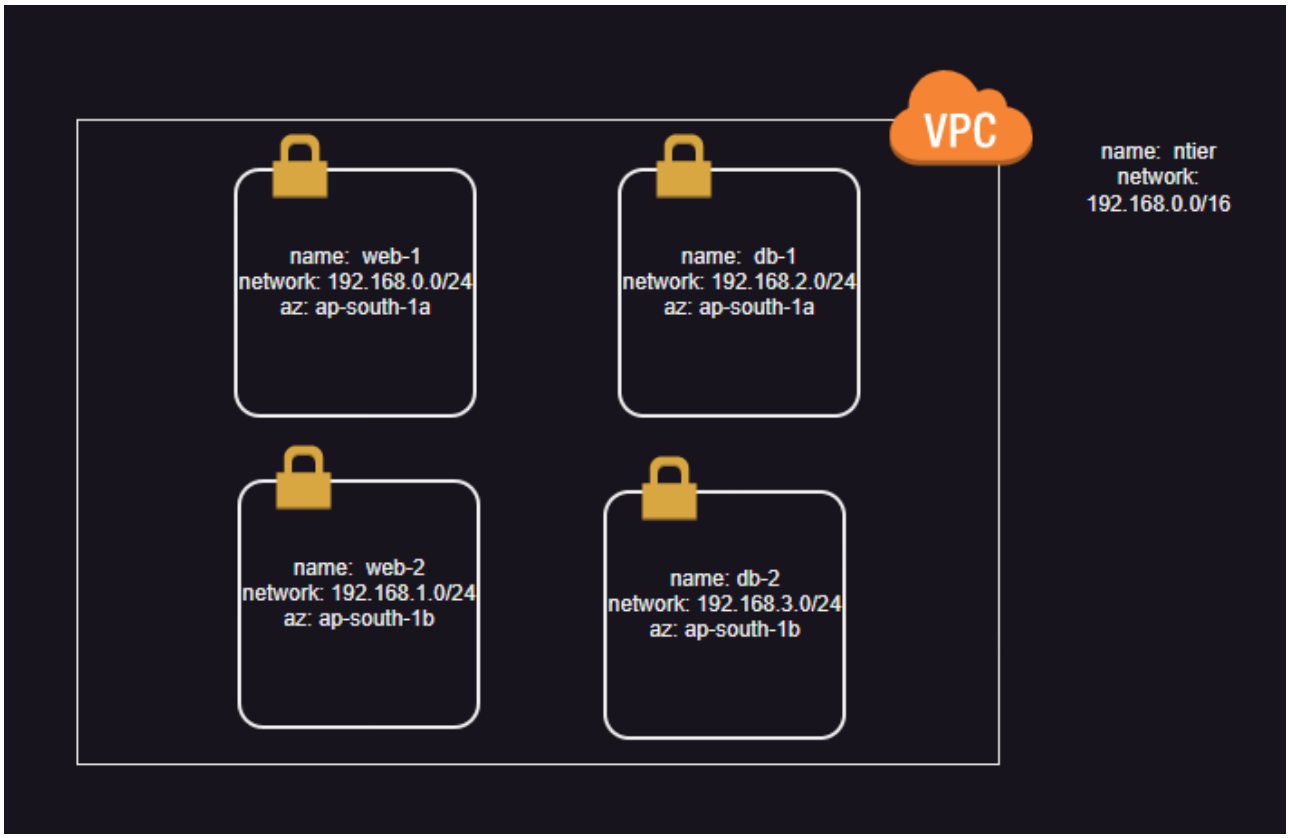
AWS Cloudformation

- Template: This is where we define what are the resources to be created.
- Stack: Execution of Template requires stack to be created. Stack belongs to a region.
- Each Template will have
    - Resources: Here we define the resources to be created.
    - Paramters: The values that be passed externally

Activity: Create a ntier network

- Overview

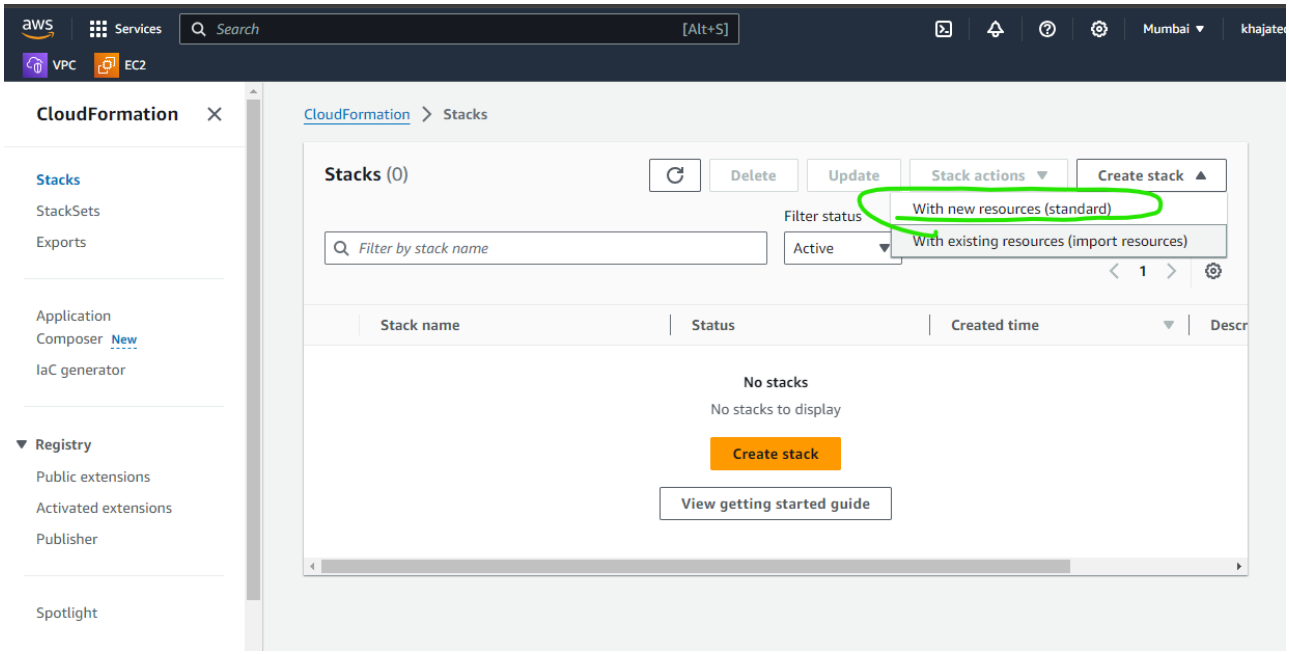


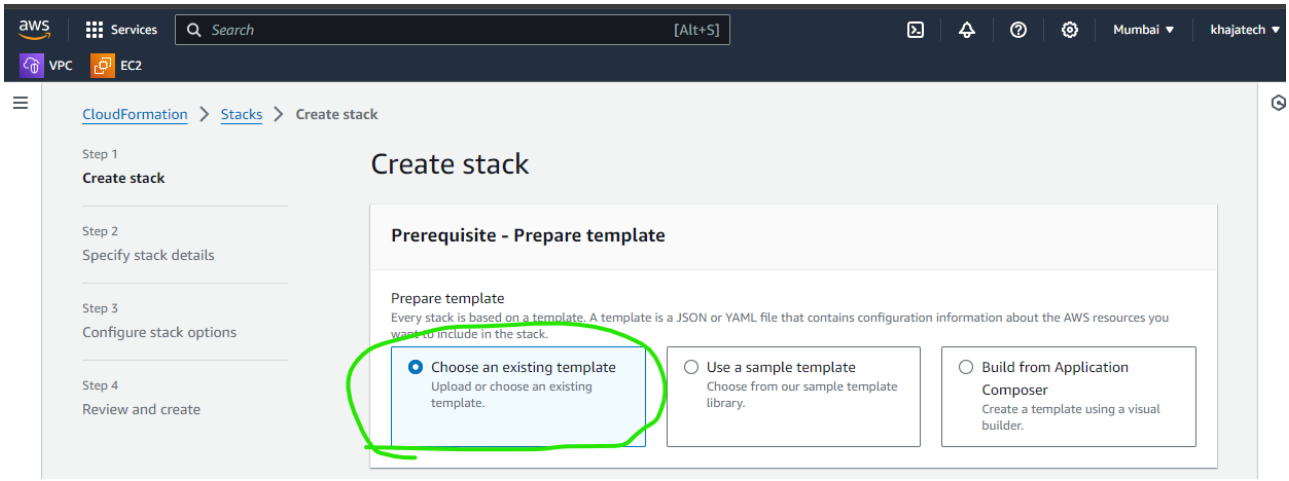
- Manual creation: Watch classroom video

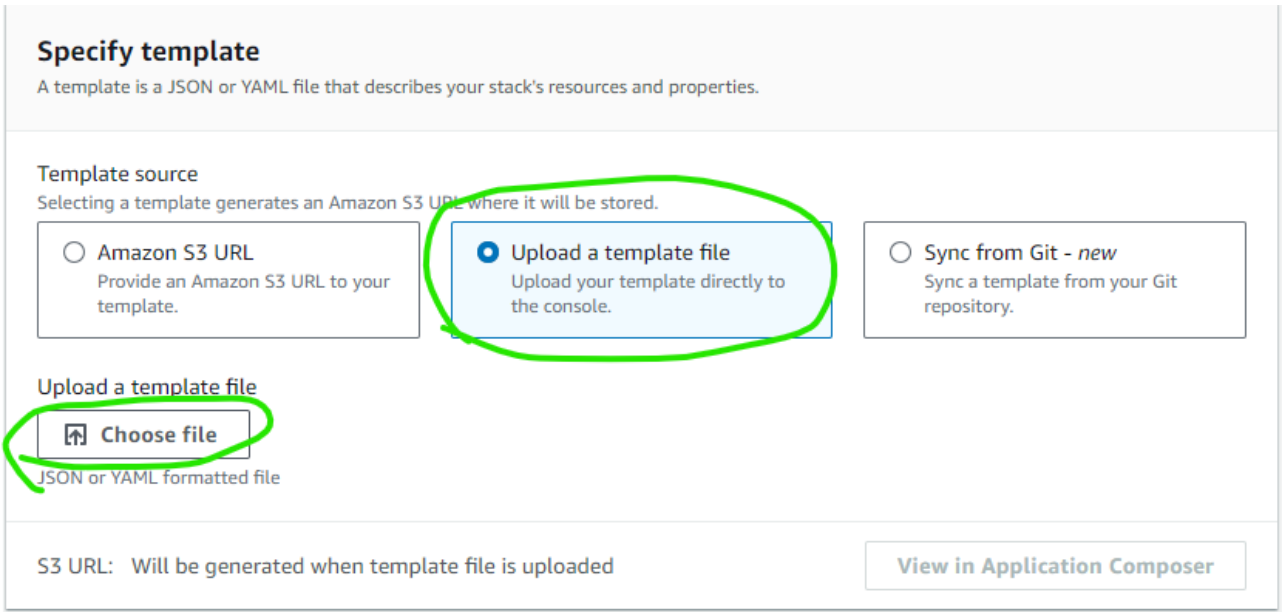
Cloud formation:

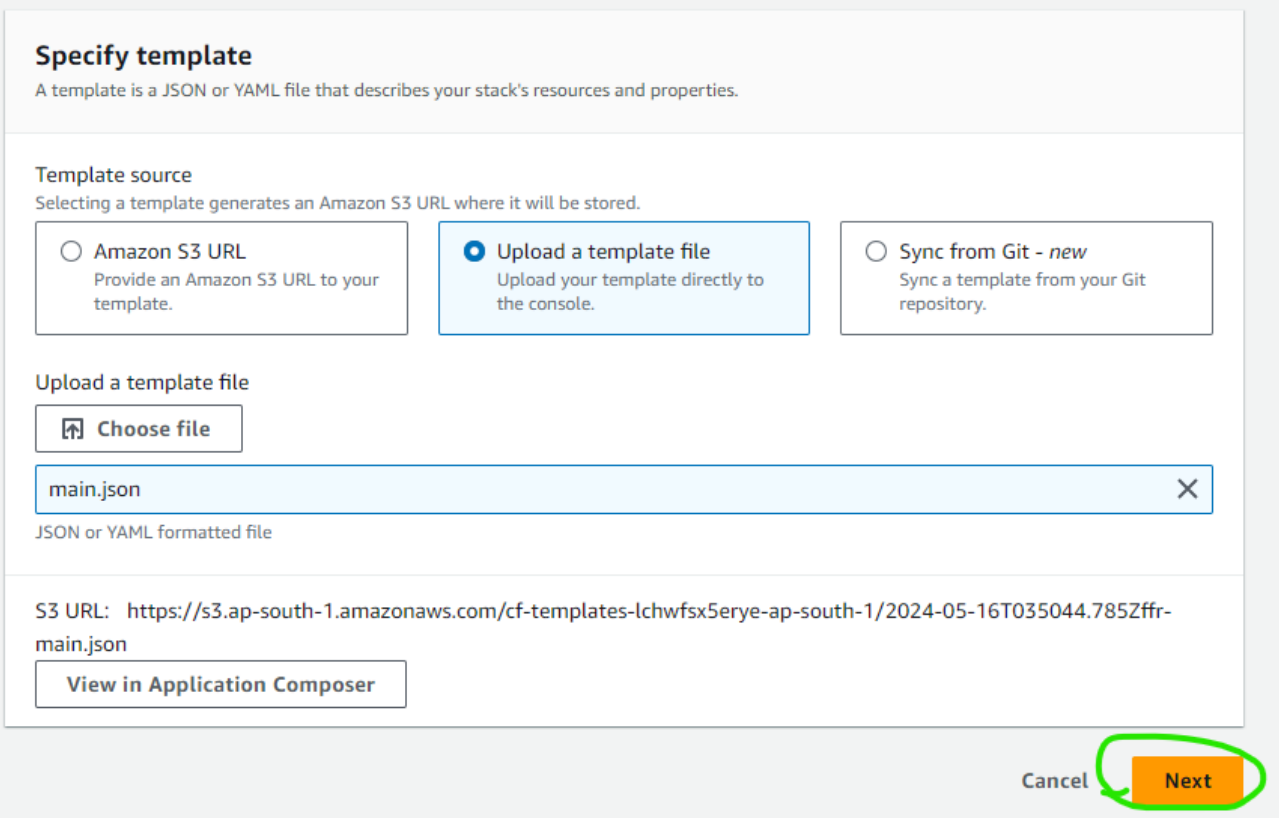
- Create a new folder with a file called as `main.json`
- cf takes file as an input
- Refer Here for cf anatomy
- Refer Here for resources

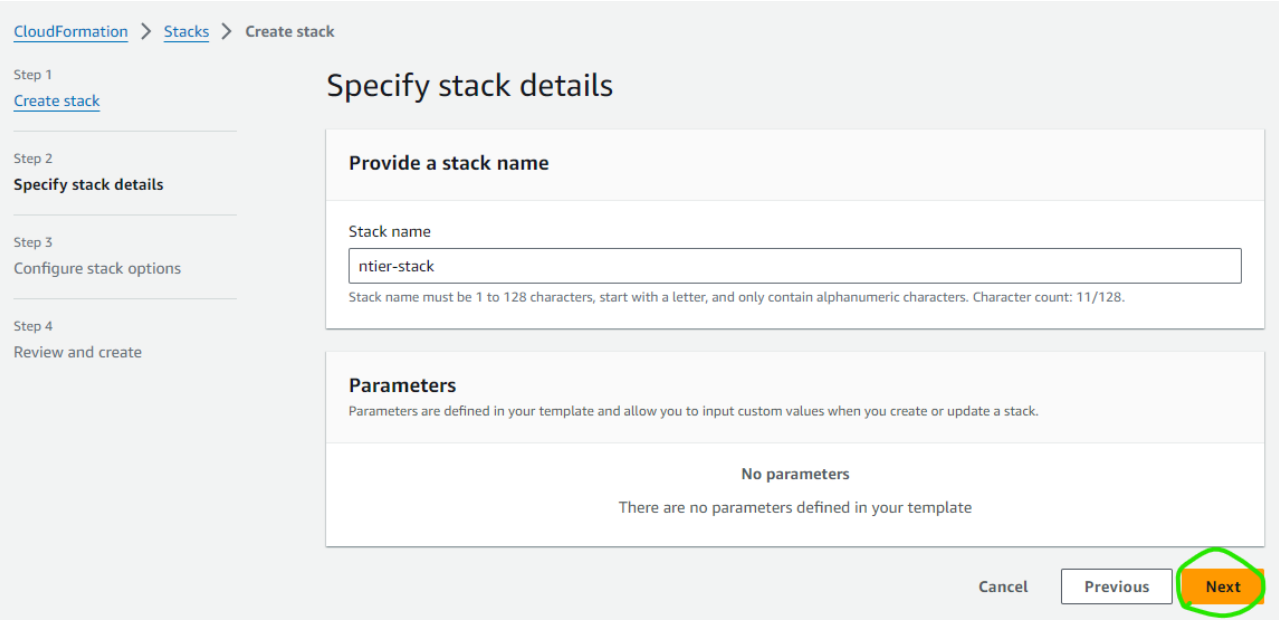
- Refer Here for the changes done, lets create a stack



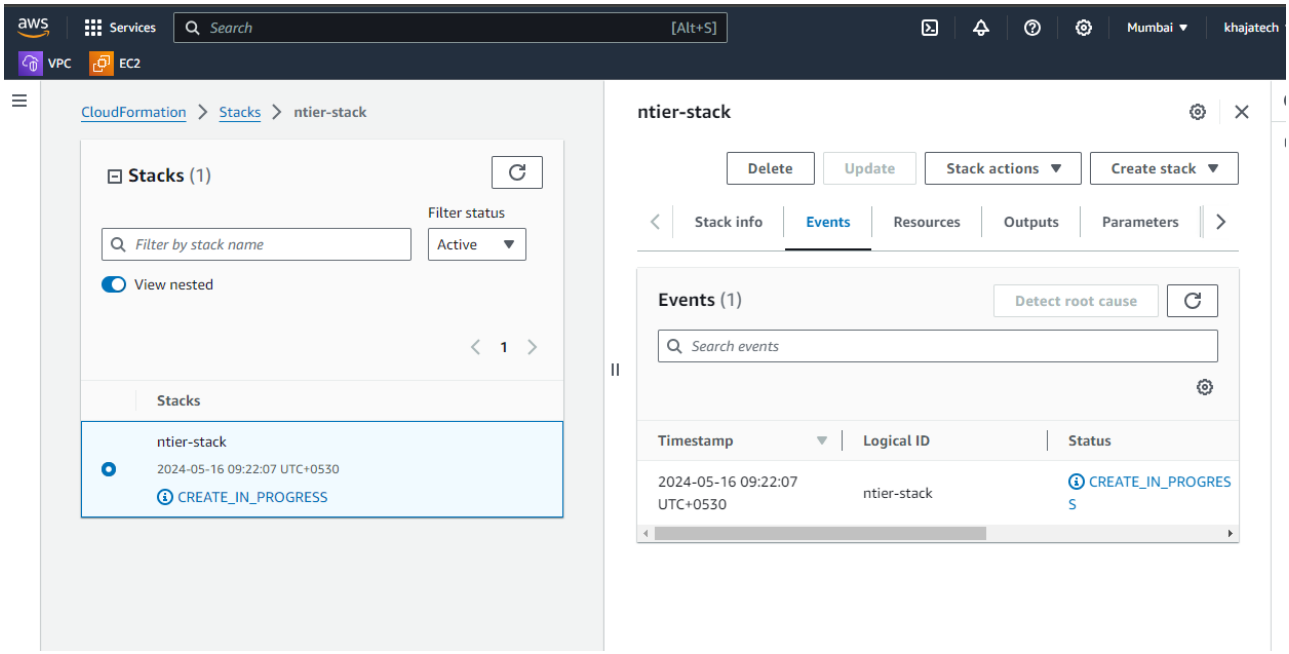


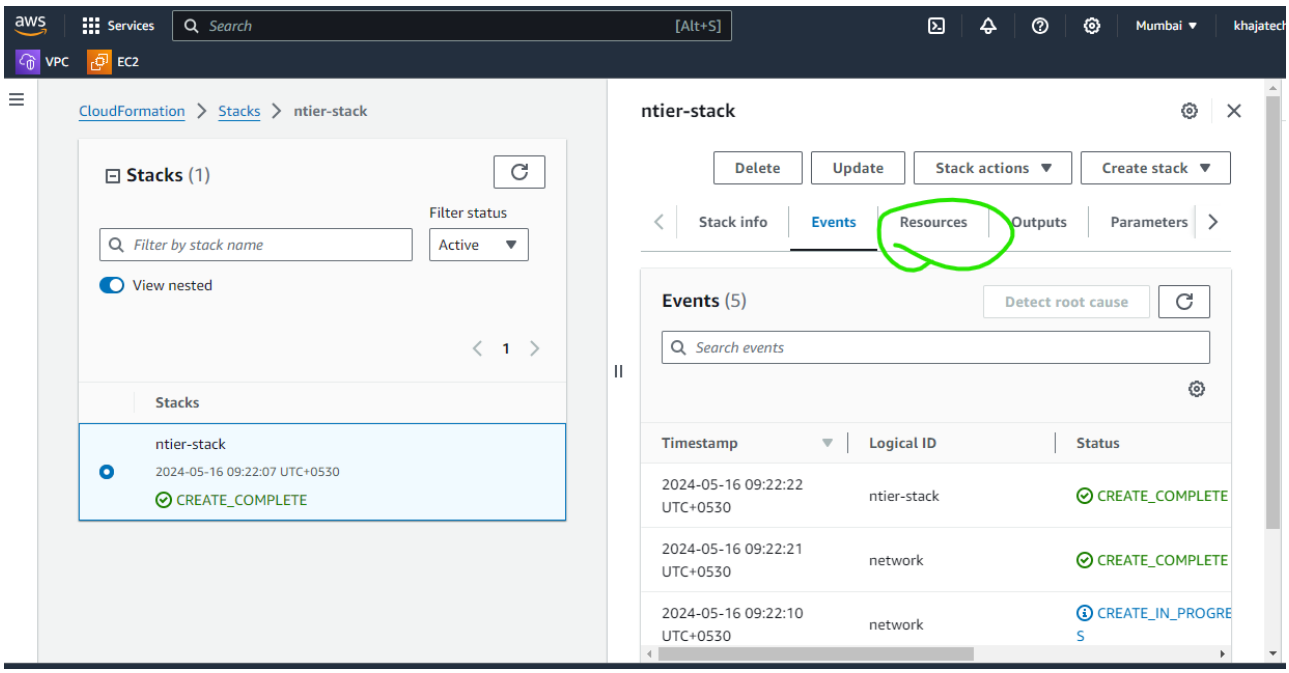


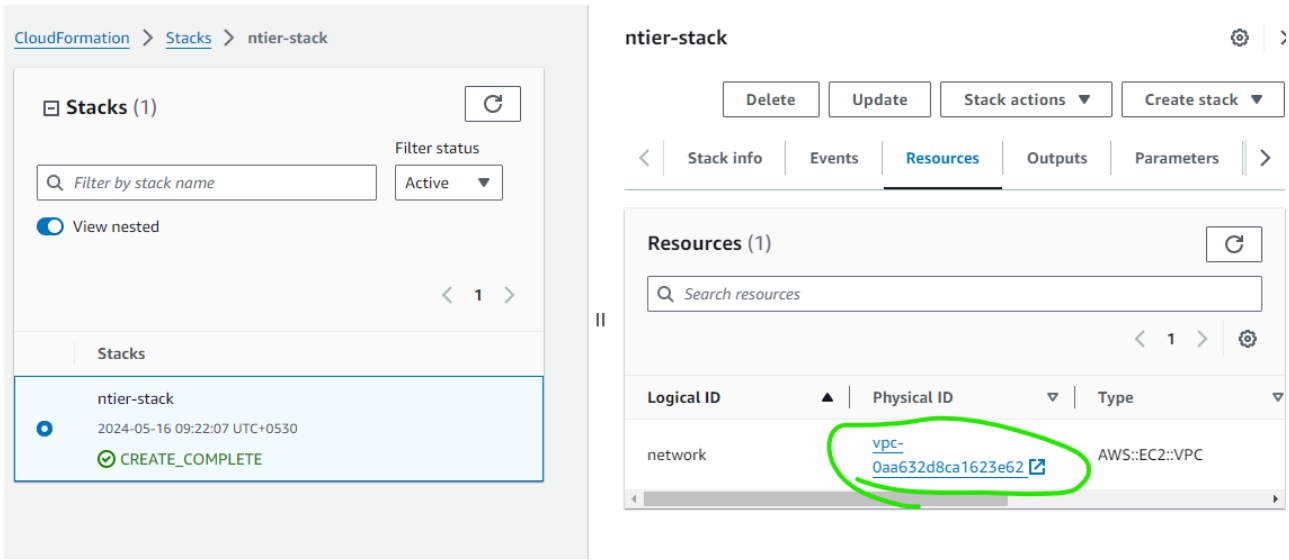

Specify template
A template is a JSON or YAML file that describes your stack's resources and properties.
Template source
Selecting a template generates an Amazon S3 URL where it will be stored.
Amazon S3 URL
Provide an Amazon S3 URL to your template.
Upload a template file
Upload your template directly to the console.
Sync from Git - new
Sync a template from your Git repository.
Upload a template file
Choose file
main.json
JSON or YAML formatted file
S3 URL: https://s3.ap-south-1.amazonaws.com/cf-templates-lchwfsx5erye-ap-south-1/2024-05-16T035044.785Zffr-main.json
View in Application Composer
Cancel
Next

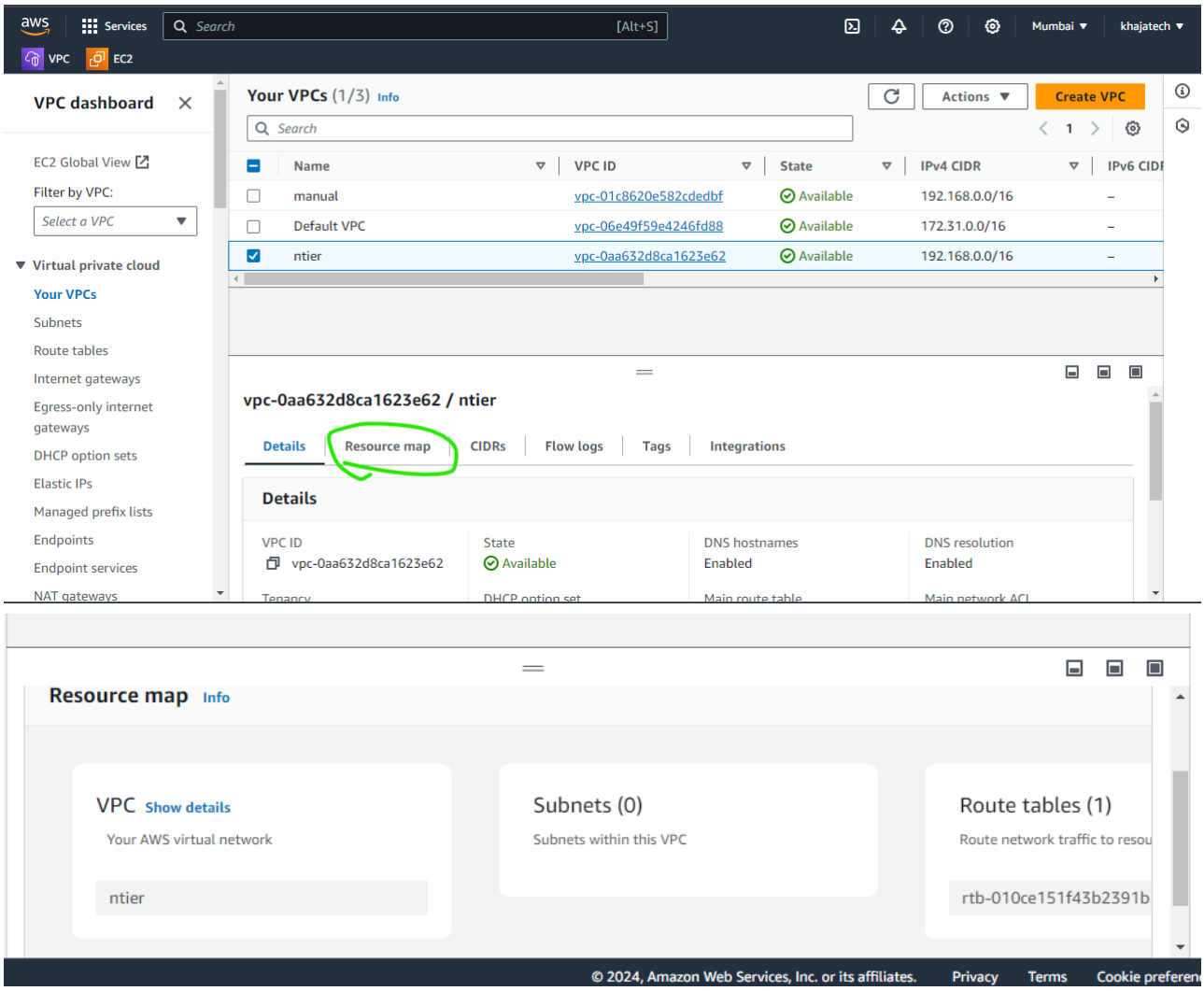

CloudFormation > Stacks > Create stack
Step 1
Create stack
Step 2
Specify stack details
Step 3
Configure stack options
Step 4
Review and create
Specify stack details
Provide a stack name
Stack name
ntier-stack
Stack name must be 1 to 128 characters, start with a letter, and only contain alphanumeric characters. Character count: 11/128.
Parameters
Parameters are defined in your template and allow you to input custom values when you create or update a stack.
No parameters
There are no parameters defined in your template
Cancel
Previous
Next

- Now continue with next till you create stack



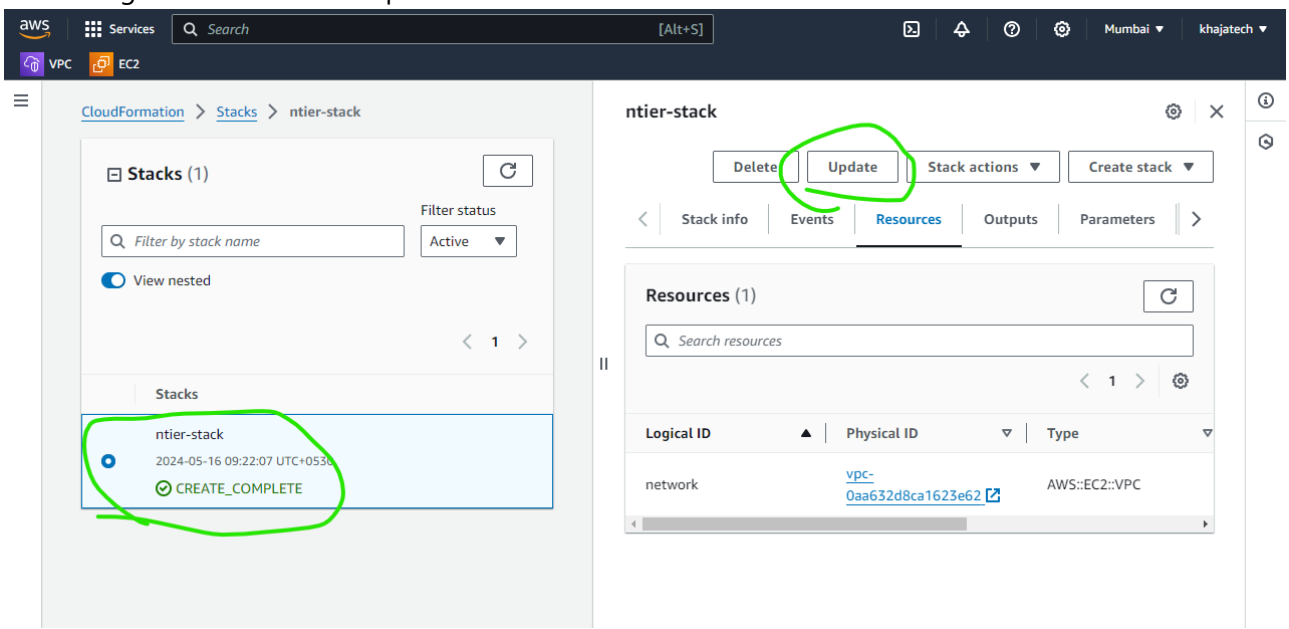


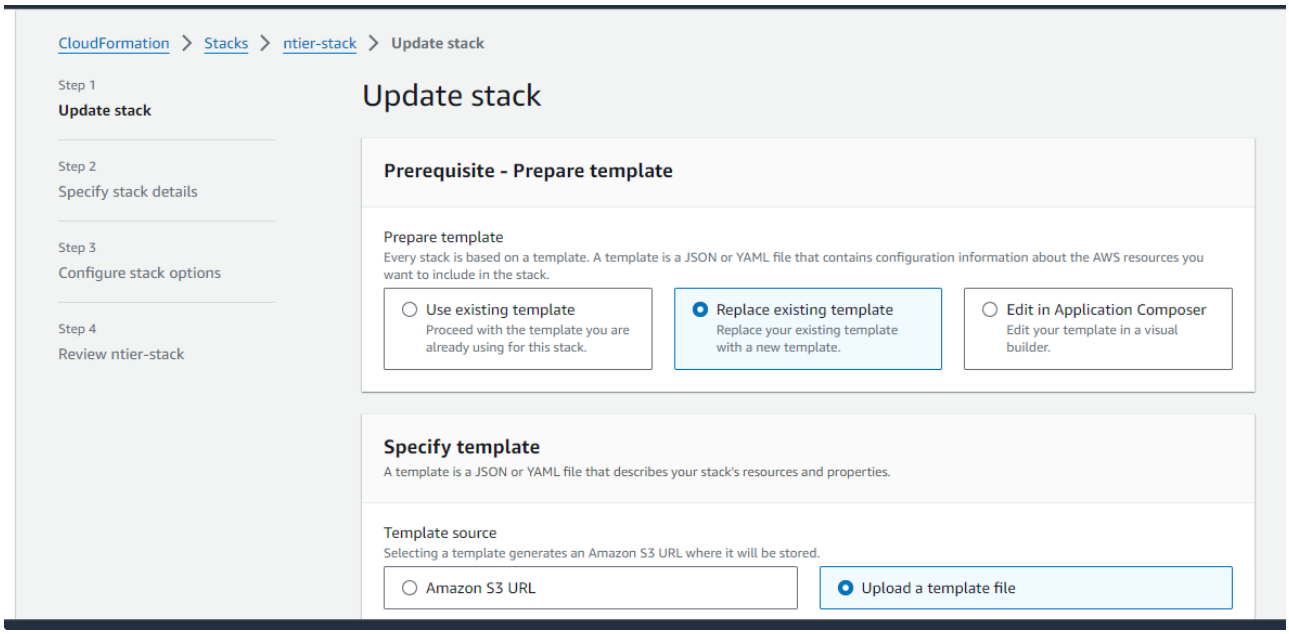




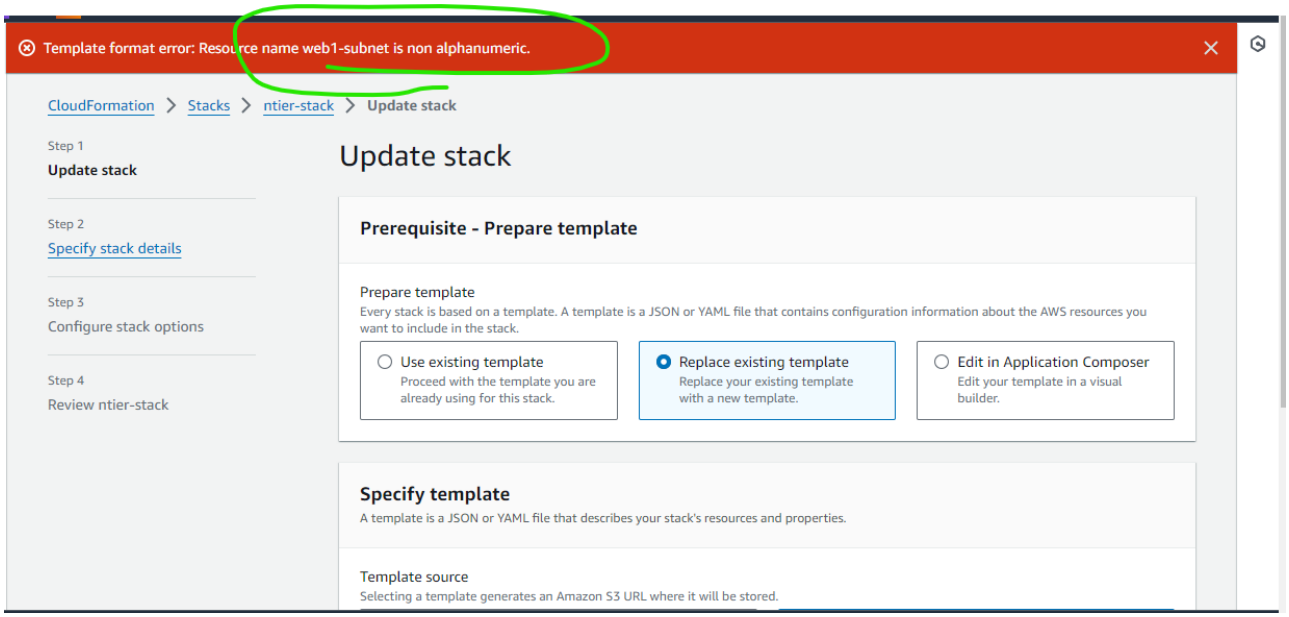
- NOw lets add 4 subnets and update the stack. Refer Here for the changes

- Now navigate to cf stack and update

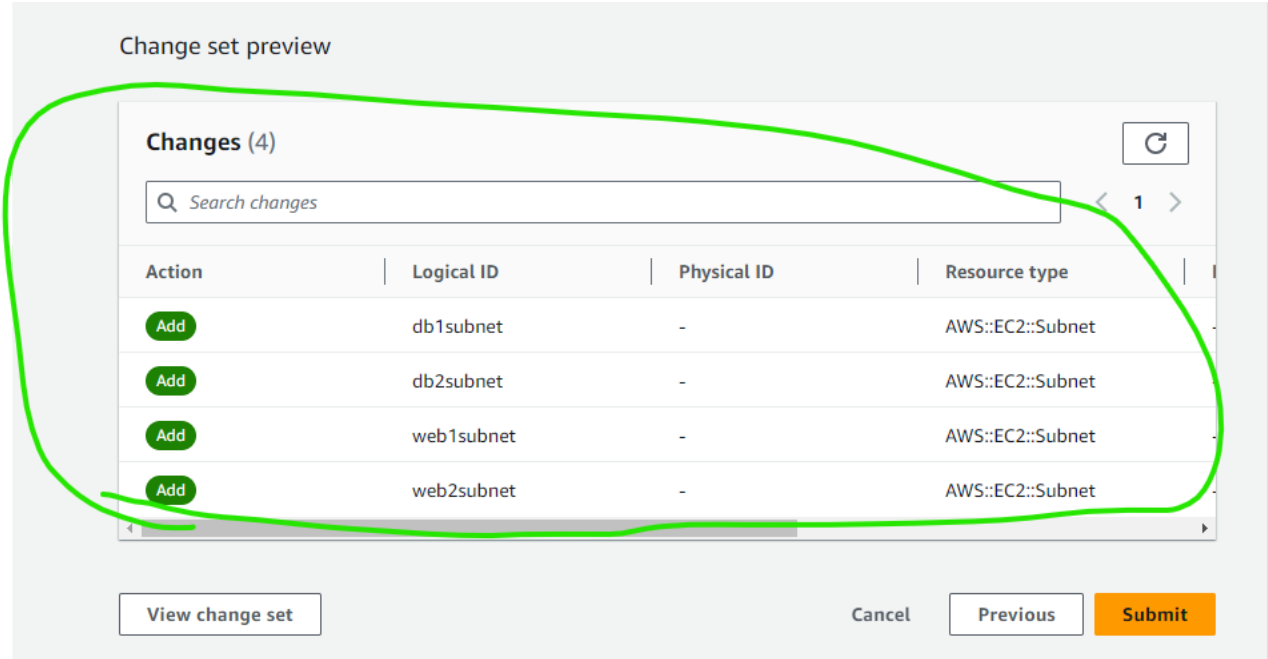




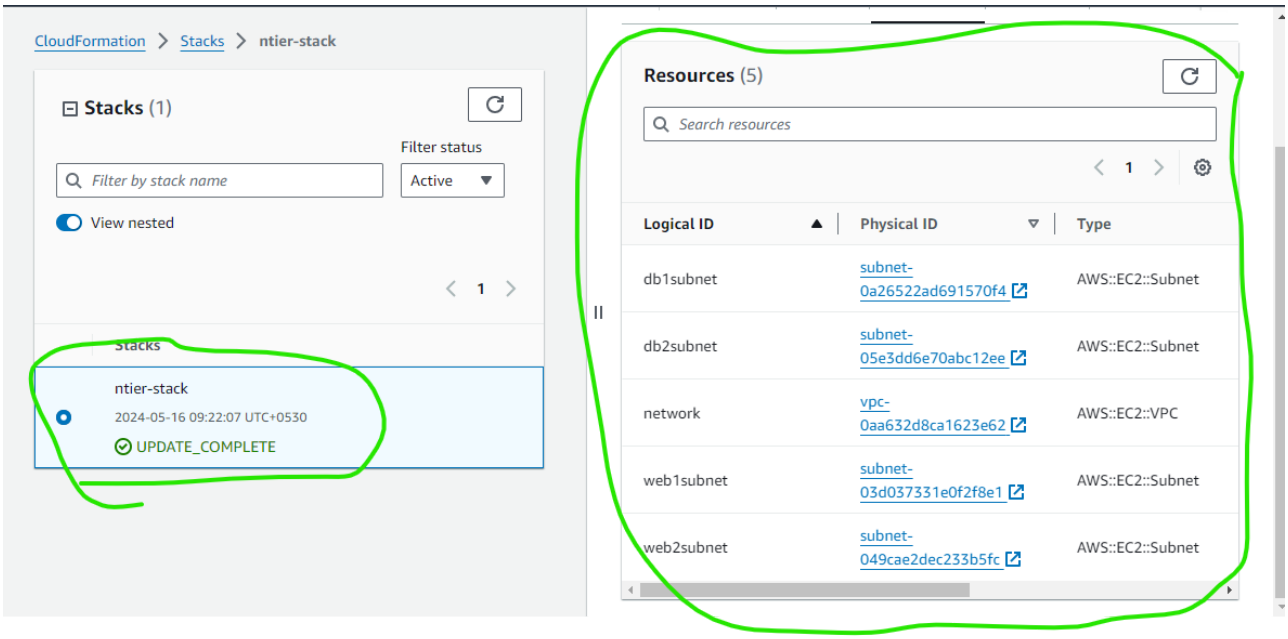
- We got error with naming conventions of logical ids

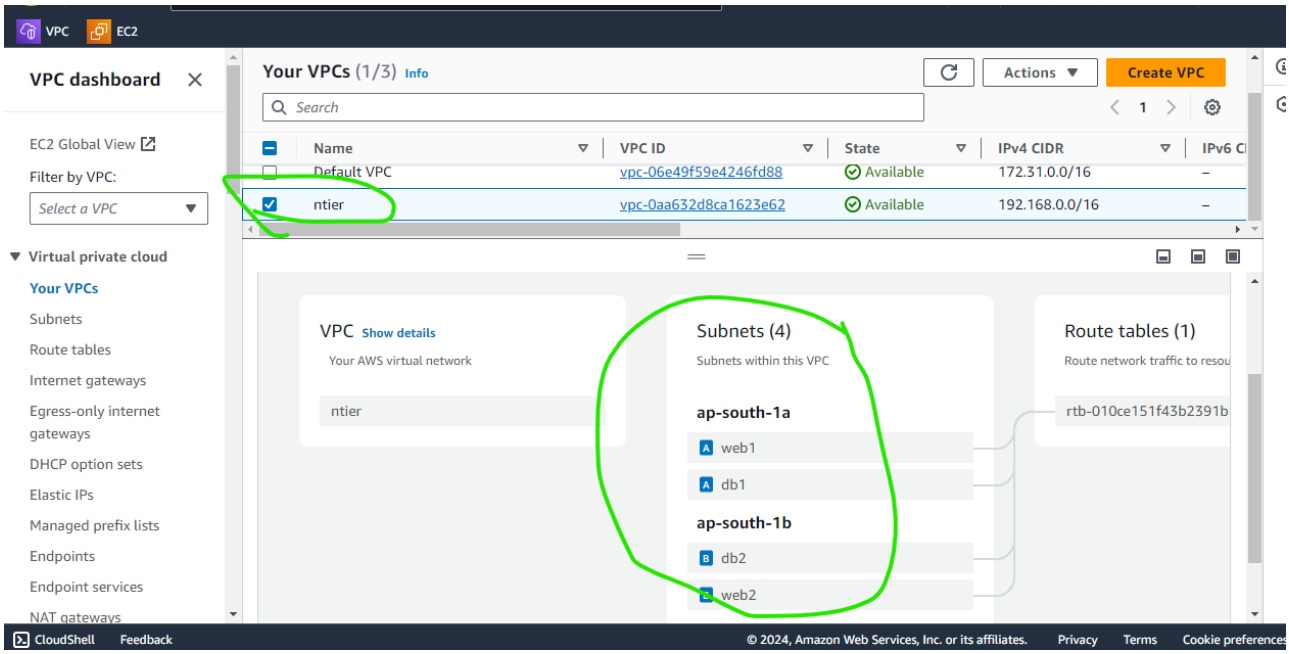


- After fixing naming convention Refer Here and reupdating the stack we got following changeset



- Now execute the changes by clicking on submit





- refer classroom video for using vs code extension
- For every property in AWS documentation it gives the values
    - Requires Replacement: This means when we update the stack by changing the property the resource will be recreated.
    - No Interruption: This means no need for recreation.