

How CodeStar - Getting started- how to create project in codestar in AWS.

What Is AWS CodeStar?

1. AWS CodeStar is a cloud-based service for creating, managing, and working with software development projects on AWS.
2. You can quickly develop, build, and deploy applications on AWS with an AWS CodeStar project.
3. An AWS CodeStar project creates and integrates AWS services for your project development toolchain. Depending on your choice of AWS CodeStar project template, that toolchain might include source control, build, deployment, virtual servers or serverless resources, and more.
4. AWS CodeStar also manages the permissions required for project users (called team members). By adding users as team members to an AWS CodeStar project, project owners can quickly and simply grant each team member role-appropriate access to a project and its resources.

What Can I Do with AWS CodeStar?

You can use AWS CodeStar to help you set up your application development in the cloud and manage your development from a single, centralized dashboard.

Specifically, you can:

1. **Start new software projects on AWS in minutes using templates for web applications, web services, and more:** AWS CodeStar includes project templates for various project types and programming languages. Because AWS CodeStar takes care of the setup, all of your project resources are configured to work together.
2. **Manage project access for your team:** AWS CodeStar provides a central console where you can assign project team members the roles they need to access tools and resources. These permissions are applied automatically across all AWS services used in your project, so you don't need to create or manage complex IAM policies.
3. **Visualize, operate, and collaborate on your projects in one place:** AWS CodeStar includes a project dashboard that provides an overall view of the project, its toolchain, and important events. You can monitor the latest project activity, like recent code commits, and track the status of your code changes, build results, and deployments, all from the same webpage. You can monitor what's going on in the project from a single dashboard and drill into problems to investigate.
4. **Iterate quickly with all the tools you need:** AWS CodeStar includes an integrated development toolchain for your project. Team members push code, and changes are automatically deployed. Integration with issue tracking allows team members to keep track of what needs to be done next. You and your team can work together more quickly and efficiently across all phases of code delivery.

How Do I Get Started with AWS CodeStar?

To get started with AWS CodeStar:

1. **Prepare & Experiment** with AWS CodeStar.
2. **Share** your project with other developers in Add Team Members to an AWS CodeStar Project
3. **Integrate** your favorite IDE in Use an IDE with AWS CodeStar.

Setting Up AWS CodeStar

Before you can start using AWS CodeStar, you must complete the following steps.

Topics

- Step 1: Create an AWS Account
- Step 2: Create the AWS CodeStar Service Role
- Step 3: Configure the User's IAM Permissions
- Step 4: Create an Amazon EC2 Key Pair for AWS CodeStar Projects
- Step 5: Open the AWS CodeStar Console.

Getting Started with AWS CodeStar

In this document, you use AWS CodeStar to create a web application. This project includes sample code in a source repository, a continuous deployment toolchain, and a project dashboard where you can view and monitor your project.

By following the steps, you:

- Create a project in AWS CodeStar.
- Explore the project.
- Commit a code change.
- See your code change deployed automatically.
- Add other people to work on your project.
- Clean up project resources when they're no longer needed.

Note

If you haven't already, first complete the steps in [Setting Up AWS CodeStar](#), including [Step 2: Create the AWS CodeStar Service Role](#). You must be signed in with an account in IAM. To create a project, you must sign in to the AWS Management Console using an IAM user that has the **AWSCodeStarFullAccess** policy.

Topics

- [Step 1: Create an AWS CodeStar Project](#)
- [Step 2: Add Display Information for Your AWS CodeStar User Profile](#)
- [Step 3: View Your Project](#)
- [Step 4: Customize the Team Wiki Tile and the Project Dashboard](#)
- [Step 5: Commit a Change](#)
- [Step 6: Add More Team Members](#)
- [Step 7: Clean Up](#)
- [Step 8: Get Your Project Ready for a Production Environment](#)

what's next.

- [Tutorial: Creating and Managing a Serverless Project in AWS CodeStar](#)
- [Tutorial: Create a Project in AWS CodeStar with the AWS CLI](#)
- [Tutorial: Create an Alexa Skill Project in AWS CodeStar](#)

Step 1: Create an AWS CodeStar Project

In this step, you create a JavaScript (Node.js) software development project for a web application. You use an AWS CodeStar project template to create the project.

The AWS CodeStar project template used in this tutorial uses the following options:

- **Application category:** Web application
- **Programming language:** Node.js
- **AWS Service:** Amazon EC2

If you choose other options, your experience might not match what's documented in this tutorial.

To create a project in AWS CodeStar

1. Sign in to the AWS Management Console, and then open the AWS CodeStar console at <https://console.aws.amazon.com/codestar/>.
2. On the **AWS CodeStar** page, choose **Create a new project**. (If you are the first user to create a project, choose **Start a project**.)
3. On the **Choose a project template** page, choose the project type from the list of AWS CodeStar project templates. You can use the filter bar to narrow your choices. For example, for a web application project written in Node.js to be deployed to Amazon EC2 instances, select the **Web application**, **Node.js**, and **Amazon EC2** check boxes. Then choose from the templates available for that set of options.
4. In **Project name**, enter a name for the project, such as *My First Project*. The ID for the project is derived from this project name, but is limited to 15 characters.
5. Choose the repository provider, **AWS CodeCommit** or **GitHub**.
6. If you chose **AWS CodeCommit**, for **Repository name**, accept the default AWS CodeCommit repository name, or enter a different one. Then skip ahead to step 8.
7. If you chose **GitHub**, choose **Connect with GitHub**.
 - a. If the **Sign in to GitHub** page is displayed, enter your GitHub user name or email address and password, and then choose **Sign in**.
8. Choose **Next**.
9. Review the resources and configuration details. Choose **Edit Amazon EC2 Configuration** (where available) if your project is deployed to Amazon EC2 instances and you want to make changes.
10. Leave the **AWS CodeStar would like permission to administer AWS resources on your behalf** check box selected. Otherwise, you cannot create a project.

Choose **Next** or **Create project**. (The displayed choice depends on your project template.)

11. In **Choose an Amazon EC2 Key Pair**, choose the Amazon EC2 key pair you created in [Step 4: Create an Amazon EC2 Key Pair for AWS CodeStar Projects](#). Select **I acknowledge that I have access to the private key file for this key pair**, and then choose **Create project**.
12. It might take a few minutes to create the project (including the repository). After your project has a repository, you can use the **Set up tools** page to configure access to it, or you can choose **Skip** and configure access later. After your project has been created, you can use the links on the **Welcome** tile to configure other items, such as your user profile in AWS CodeStar.



Filter

Application category

☐ Web application

☐ Web service

☐ Alexa Skill

☐ Static Website

☐ AWS Config Rule

Programming languages

☐ C#

☐ Go


☐ HTML 5


☐ Java


☐ Node.js


Choose a project template


Start a new software project on AWS in minutes using a project template. [Help me choose](#)


 Go


 Web application


 AWS Lambda (running serverless)


 Node.js

 Web application


 AWS Lambda (running serverless)


 Python


 Web service


 AWS Lambda (running serverless)


Express


 Express.js

 Web service

 HTML

 Static Website

 Java Spring

 Web service

Project name

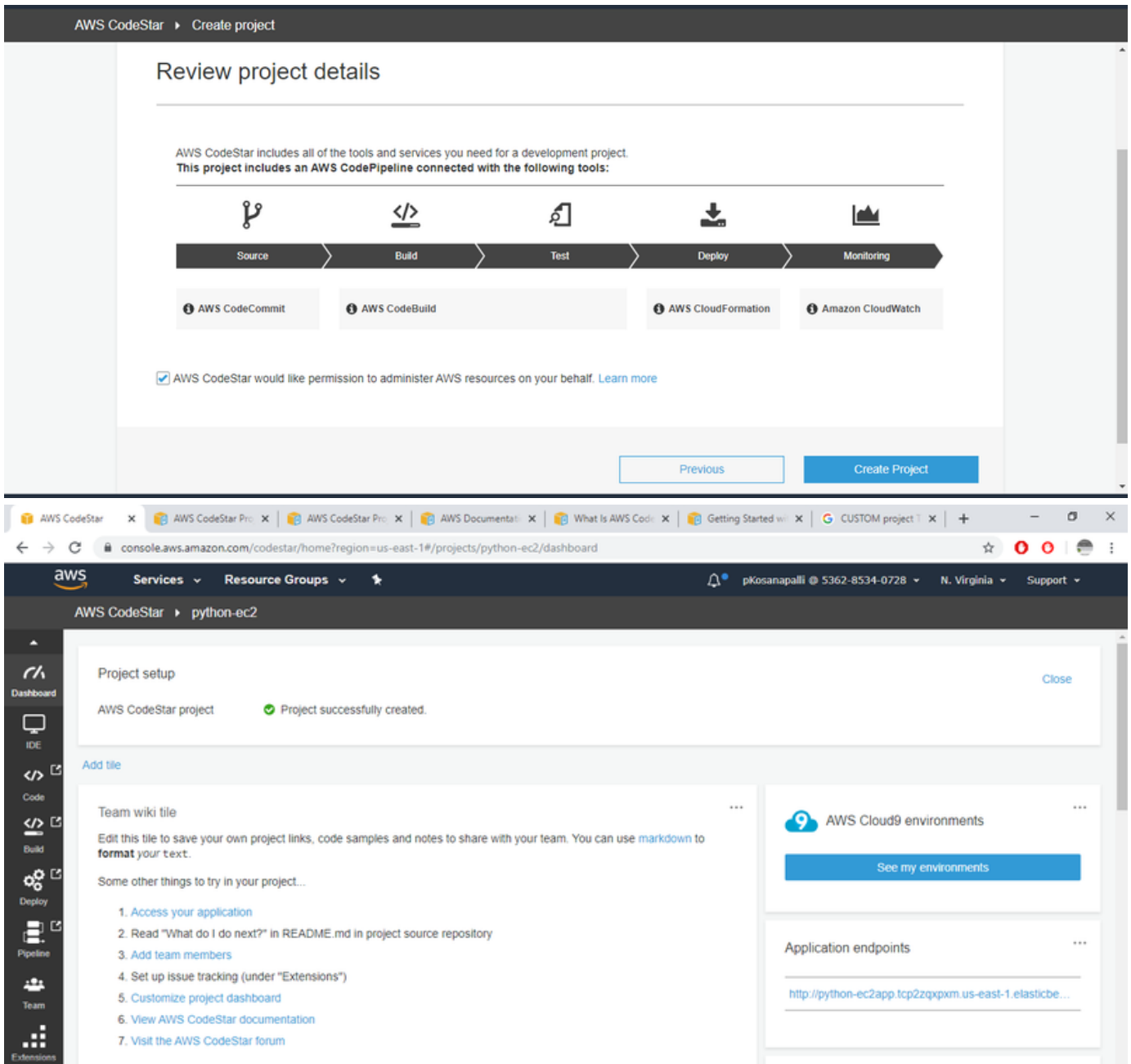
Project ID [Edit](#)

Which repository do you want to use?
AWS CodeStar will store the project's source code with the service you choose here.

 **AWS CodeCommit**
Highly available Git source control from AWS. Includes encryption, IAM integration, and more.

 **GitHub**
Creates a GitHub source repository for this project. Requires an existing GitHub account.

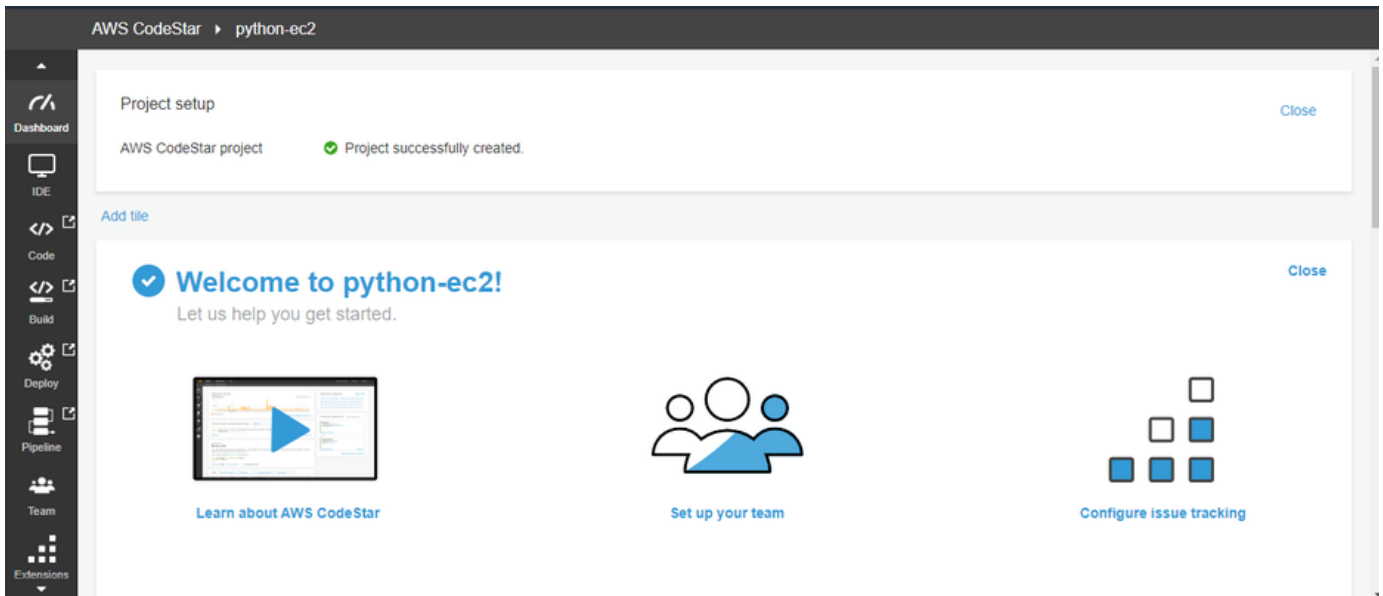
Repository name



Step 2: Add Display Information for Your AWS CodeStar User Profile

When you create a project, you're added to the project team as an owner. If this is the first time you've used AWS CodeStar, you are asked to provide:

- Your display name to show to other users.
- The email address to show to other users.

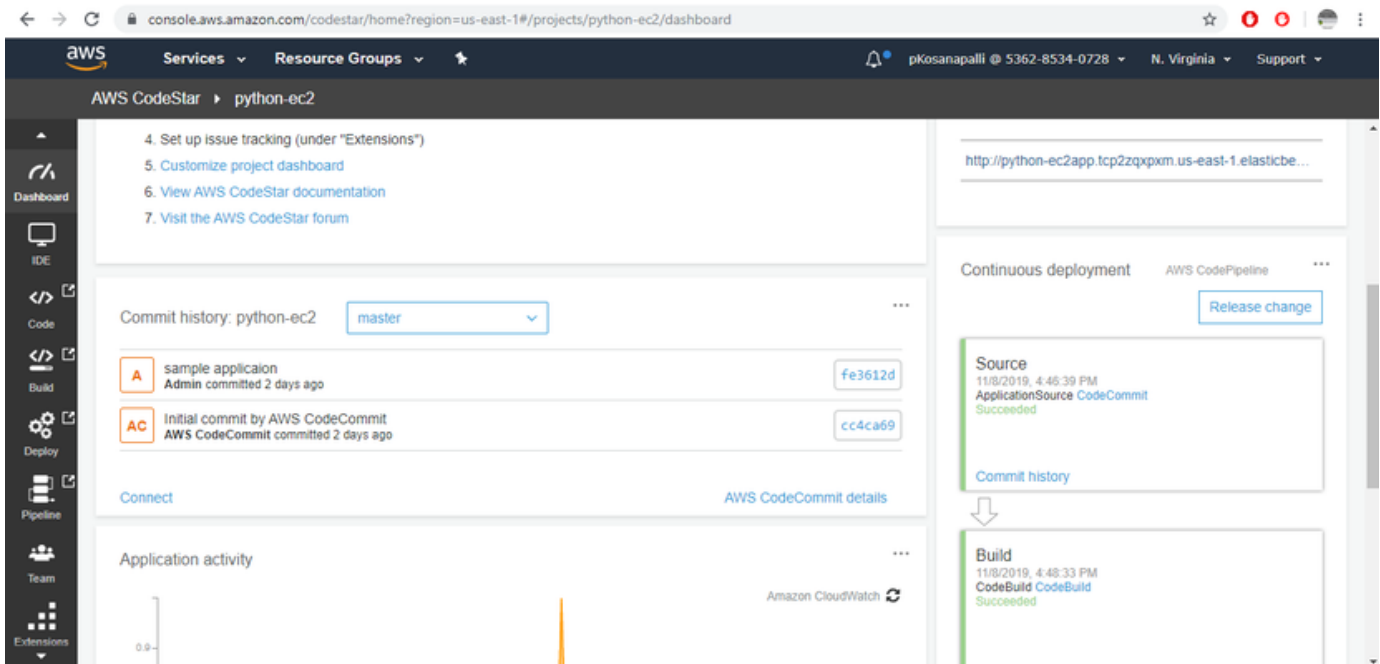


Step 3: View Your Project

Your AWS CodeStar project dashboard is where you and your team view the status of your project resources, including the latest commits to your project, the state of your continuous delivery pipeline, and the performance of your instances. This information is displayed on tiles that are dedicated to a resource. You can change where each tile appears on your dashboard by dragging and dropping it to a new location. You can also use the ellipsis menu on each tile to remove that tile from the display. To add a tile, in the dashboard, choose **Add tile**.

In your new project, you see the following tiles:

- The **Welcome** tile contains links to actions you might want to perform. Unlike other tiles, you cannot move this tile to another location, or add it back after closing it.
- The **Continuous deployment** tile displays a summary view of the continuous delivery pipeline for your project.
- The **Application endpoints** tile displays links to the endpoints where you can view your software. Choose the link to view your application or service.
- The **Commit history** tile displays the recent commit history of the repository.
- The **Application activity** tile displays Amazon CloudWatch metrics for your project.
- The **JIRA** tile is for integrating your AWS CodeStar project with an Atlassian JIRA project. Configuring this tile makes it possible for you and your project team to track JIRA issues from the project dashboard. To configure this tile, choose **Connect**, and then follow the instructions.
- There is also a **Team wiki** tile. You can customize the contents of this tile to store team notes, link to useful resources for your team project, provide samples, and so on. You customize this tile in the next step.



Step 4: Customize the Team Wiki Tile and the Project Dashboard

To customize the team wiki tile

1. In the project dashboard, on the team wiki tile, choose the ellipsis menu, and then choose **Edit**.
2. In **Widget title**, enter **Team links**. In **Markdown content**, add an item to the list and paste the following:

```
[AWS DevOps Blog](https://aws.amazon.com/blogs/devops/)
```

Choose **Save**.

3. Choose the link on the tile to test it.

Step 5: Commit a Change

First, take a look at the sample code that was included in your project, and see what the application looks like. On the **Application endpoints** tile, choose the link to your endpoint. Your sample web application is displayed in a new window or browser tab. This is the project sample that AWS CodeStar built and deployed.

If you'd like to look at the code, in the navigation bar, choose **Code**. Your project's repository opens in a new tab or window. Read the contents of the repository's readme file (`README.md`), and browse the content of those files.

In this step, you make a change to the code and then push the change to your repository. You can do this in one of several ways:

- If the project's code is stored in a CodeCommit or GitHub repository, you can use AWS Cloud9 to work with the code directly from your web browser, without installing any tools.
- If the project's code is stored in a CodeCommit repository, and you have Visual Studio or Eclipse installed, you can use the AWS Toolkit for Visual Studio or AWS Toolkit for Eclipse to more easily connect to the code.
- If the project's code is stored in a GitHub repository, you can use your IDE's tools for connecting to GitHub.
- For other types of code repositories, see the repository provider's documentation.

Example: To clone the project repository and make a change

1. On your local computer, open a terminal or command line window and change directories to a temporary directory. Run the **git clone** command to clone the repository to your computer. Paste the link you copied. For example, for CodeCommit using HTTPS:

```
git clone https://git-codecommit.us-east-2.amazonaws.com/v1/repos/my-first-project
```

The first time you connect, you are prompted for the user name and password for the repository. For CodeCommit, enter the Git credentials user name and password you downloaded in the previous procedure.

2. Navigate to the cloned directory on your computer and browse the contents.
3. Open the `index.html` file (in the public folder) and make a change to the file. For example, add a paragraph after the `<H2>` tag such as:

```
<P>Hello, world!</P>
```

Save the file.

- At the terminal or command prompt, add your changed file, and then commit and push your change:

```
git add index.html
git commit -m "Making my first change to the web app"
git push
```

- On your project dashboard, view the changes in progress. You should see that the commit history for the repository is updated with your commit, including the commit message. You can also see the pipeline pick up your change to the repository and start building and deploying it. After your web application is deployed, you can use the links you added to the project information tile to view your change.

Note

If **Failed** is displayed for any of the pipeline stages.

Step 6: Add More Team Members

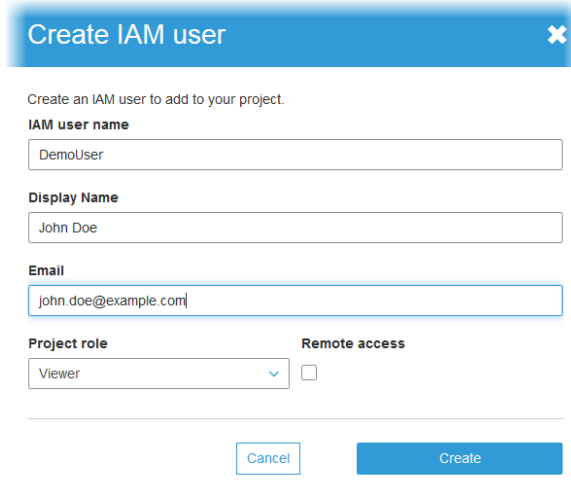
Every AWS CodeStar project is already configured with three AWS CodeStar roles. Each role provides its own level of access to the project and its resources.

To add a team member to an AWS CodeStar project (console)

- Open the AWS CodeStar console at <https://console.aws.amazon.com/codestar/>.

Choose the project.

- In the navigation bar for the project, choose **Team**.
- On the **Team members** page, choose **Add team member**.
- In **Choose user**, do one of the following:
 - If an IAM user does not exist for the person you want to add to the project, choose **Create new IAM user**. Enter the IAM user name, AWS CodeStar display name, email address, and project role you want to apply to this new user, and then choose **Create**.



You are redirected to the IAM console to confirm user creation. Choose **Create user**, save the password information for that new user, and then choose **Close** to return to the AWS CodeStar console. The user is added to the project with the role you chose.

Step 7: Clean Up

Congratulations! You've finished the tutorial. If you don't want to continue to use this project and its resources, you should delete it to avoid possible continued charges to your AWS account.

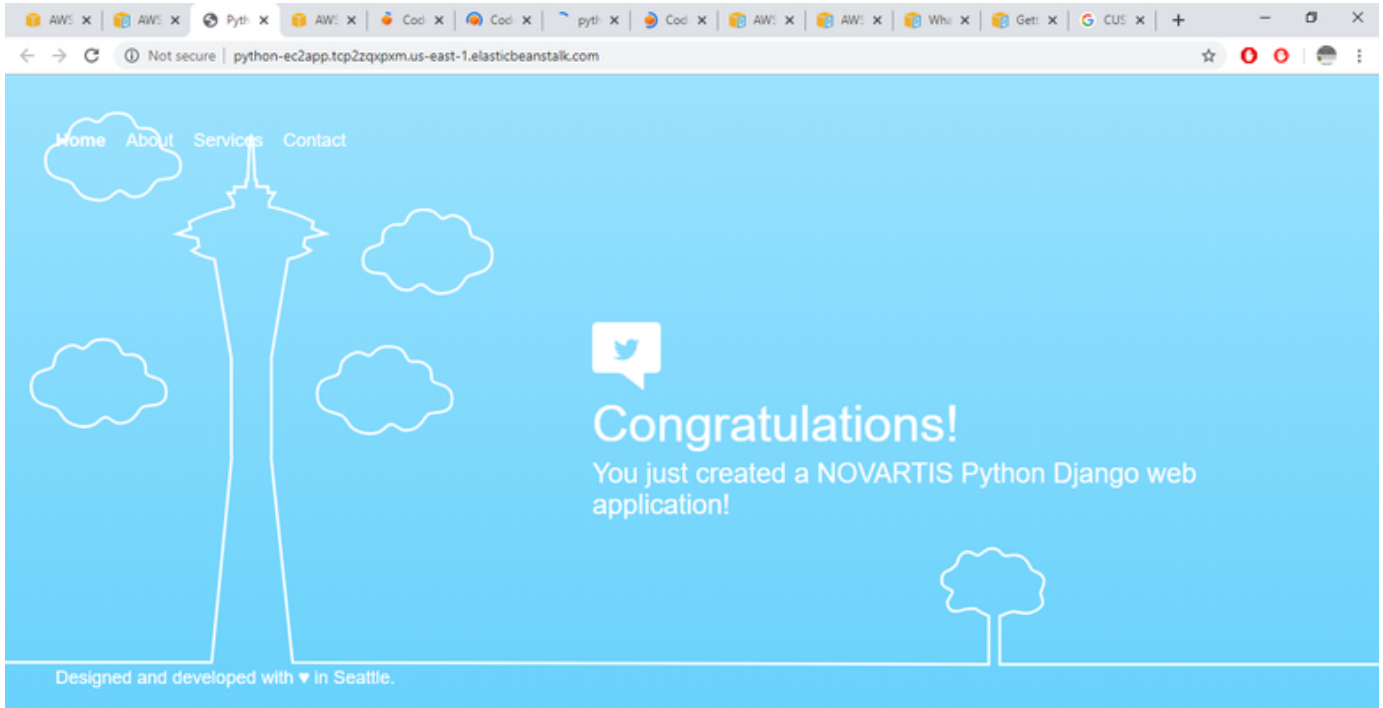
To delete a project in AWS CodeStar

- Open the AWS CodeStar console at <https://console.aws.amazon.com/codestar/>.
- Find the project in the list, and from the ellipsis (...), choose **Delete**.

Step 8: Get Your Project Ready for a Production Environment

After you have created your project, you are ready to create, test, and deploy code. Review the following considerations for maintaining your project in a production environment:

- Regularly apply patches and review security best practices for the dependencies used by your application
- Regularly monitor the environment settings suggested by the programming language for your project.



that's all done!!!

AWS codestar:

languages supports
Go
node.js
python,python(django,flask)
express.js
html
java spring
php
asp.net
alexa skill(python,nodejs,java)
ruby on rails(sinatra)

Application category:

- Web application
- Web service
- Alexa Skill
- Static Website
- AWS Config Rule.

AWS services:

- AWS Elastic Beanstalk
- Amazon EC2
- AWS Lambda

