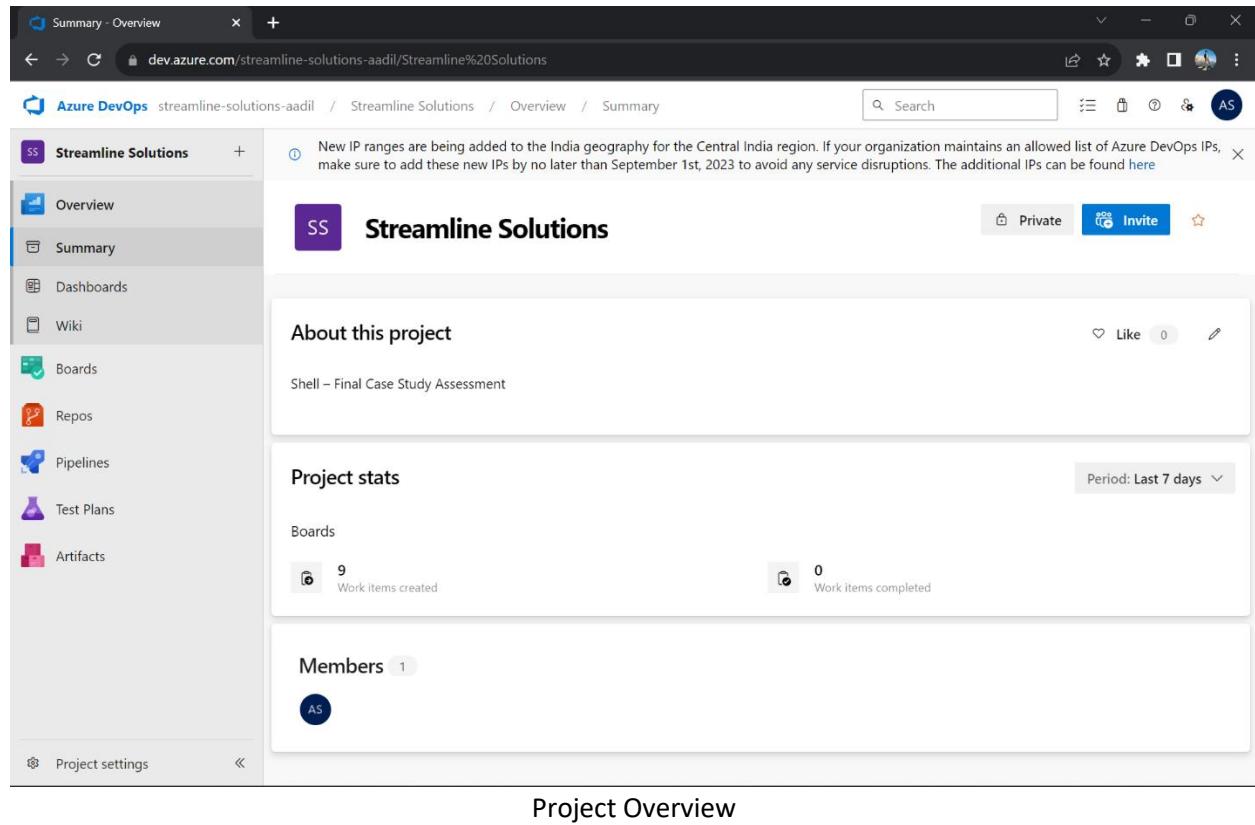


Shell – Final Case Study Assessment

Mohammad Aadil Sehrawat
Employee Code: 654985

1. AZURE BOARD ACTIVITIES



The screenshot shows the Azure DevOps interface for the 'Streamline Solutions' project. The left sidebar lists project navigation options: Overview, Summary (selected), Dashboards, Wiki, Boards, Repos, Pipelines, Test Plans, and Artifacts. The main content area displays the 'Project Overview' with sections for 'About this project' (description: 'Shell – Final Case Study Assessment'), 'Project stats' (Boards: 9 work items created, 0 completed), and 'Members' (1 member: AS). A top banner indicates new IP ranges are being added to the India geography.

About this project
Shell – Final Case Study Assessment

Project stats
Period: Last 7 days

Members 1
AS

Work items - Boards

dev.azure.com/streamline-solutions-aadil/Streamline%20Solutions/_workitems/recentlyupdated/

Azure DevOps streamline-solutions-aadil / Streamline Solutions / Boards / Work items

New IP ranges are being added to the India geography for the Central India region. If your organization maintains an allowed list of Azure DevOps IPs, make sure to add these new IPs by no later than September 1st, 2023 to avoid any service disruptions. The additional IPs can be found [here](#)

Streamline Solutions

Overview

Boards

Work items

Boards

Backlogs

Sprints

Queries

Delivery Plans

Analytics views

Repos

Pipelines

Test Plans

Artifacts

Project settings

Work items

Recently updated

+ New Work Item

Open in Queries

Column Options

Import Work Items

Filter by keyword

ID	Title	Assigned To	State	Area Path
1	Landing Page	Unassigned	New	Streamline S
2	Login	Unassigned	New	Streamline S
3	Login Email and Password Fields	Unassigned	New	Streamline S
4	Login Validation	Unassigned	New	Streamline S
5	Sign Up	Unassigned	New	Streamline S
6	Signup Email and Password Fields	Unassigned	New	Streamline S
7	Google and other signups	Unassigned	New	Streamline S
8	Google and other logins	Unassigned	New	Streamline S
9	Signup Validation	Unassigned	New	Streamline S

Project Work Items

Streamline Solutions Team Stories

dev.azure.com/streamline-solutions-aadil/Streamline%20Solutions/_boards/board/t/Streamline%20Solutions%20Team/Stories

Azure DevOps streamline-solutions-aadil / Streamline Solutions / Boards / Boards

New IP ranges are being added to the India geography for the Central India region. If your organization maintains an allowed list of Azure DevOps IPs, make sure to add these new IPs by no later than September 1st, 2023 to avoid any service disruptions. The additional IPs can be found [here](#)

Streamline Solutions

Overview

Boards

Work items

Boards

Backlogs

Sprints

Queries

Delivery Plans

Analytics views

Repos

Pipelines

Test Plans

Artifacts

Project settings

Streamline Solutions Team

Board

Analytics

View as Backlog

Stories

New

Active

Resolved

Closed

1/5

2/5

8 Google and other logins

State: New

4 Login Validation

State: Active

9 Signup Validation

State: Resolved

7 Google and other signups

State: Resolved

6 Signup Email and Password Fields

State: Closed

3 Login Email and Password Fields

State: Closed

Add Test

Signup Form Submission

Signup Validation

Project Boards

Streamline Solutions Team Stories

dev.azure.com/streamline-solutions-aadil/Streamline%20Solutions/_backlogs/backlog/Streamline%20Solutions%20Team/Stories

Streamline Solutions Team Backlog

New IP ranges are being added to the India geography for the Central India region. If your organization maintains an allowed list of Azure DevOps IPs, make sure to add these new IPs by no later than September 1st, 2023 to avoid any service disruptions. The additional IPs can be found [here](#).

Planning

Drag and drop work items to include them in a sprint.

Streamline Solutions Team Backlog

Iteration 1 (Planned Effort: -)

- 1 User Story: Signup Validation (2, 4, 2)
- 2 User Story: Google and other signups
- 3 User Story: Login Validation
- 4 User Story: Google and other logins

Iteration 2 (Planned Effort: -)

- 3 User Stories

Iteration 3 (No work scheduled yet)

[New Sprint](#)

Project Backlogs

Streamline Solutions Team Iterations

dev.azure.com/streamline-solutions-aadil/Streamline%20Solutions/_sprints/taskboard/Streamline%20Solutions%20Team/Streamline%20Solutions/Iterations

Streamline Solutions Team Sprints

New IP ranges are being added to the India geography for the Central India region. If your organization maintains an allowed list of Azure DevOps IPs, make sure to add these new IPs by no later than September 1st, 2023 to avoid any service disruptions. The additional IPs can be found [here](#).

Taskboard

Collapsible	New	Active	Resolved	Closed
7 Google and other signups Unassigned State: Resolved	10 Google Authentication Token Unassigned State: New		11 Token Validation Unassigned State: Resolved	
6 Signup Email and Password Fields Unassigned State: Closed		14 Submit Form Unassigned State: Active	15 Form CSRF Unassigned State: Resolved	12 Create Fields Unassigned State: Closed
		13 Assign Field Type Unassigned State: Closed		

Project Sprints

Runner - Test Plans - Google Chrome
dev.azure.com/streamline-solutions-aadil/Streamline%20Solutions/_testExecution/Index

Save and close Create bug Test 1 of 2 next ▾

16: Signup Form Submission

1. Input Email and Password
EXPECTED RESULT
Input Received

2. Send and Validate Form Submission
EXPECTED RESULT
Form sent and validated

Windows 10

Test Case – 1 (Success)

Runner - Test Plans - Google Chrome
dev.azure.com/streamline-solutions-aadil/Streamline%20Solutions/_testExecution/Index

Save and close Create bug Test 2 of 2 next ▾

◀ prev

20: Signup Validation

1. Email and Password meet criteria
EXPECTED RESULT
Email and Password met criteria

COMMENT

Windows 10

Test Case – 2 (Fail)

Runner - Test Plans - Google Chrome

dev.azure.com/streamline-solutions-aadil/Streamline%20Solutions/_testExecution/Index

Save and close Create bug Test 2 of 2

20*: Signup Validation

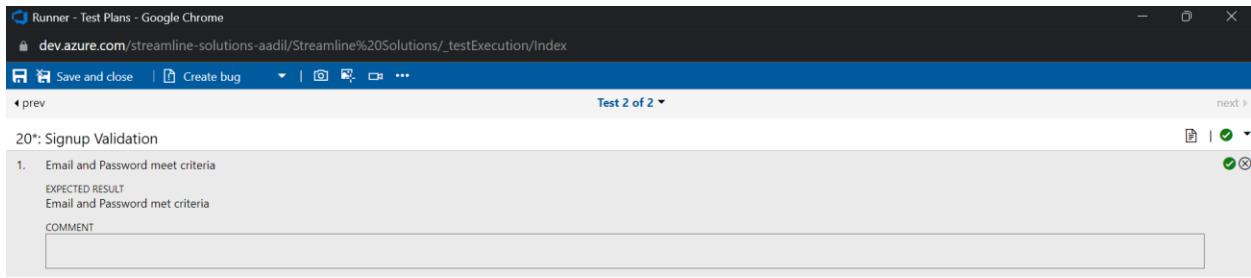
1. Email and Password meet criteria

EXPECTED RESULT
Email and Password met criteria

COMMENT

Test 2 of 2

next ▶



Windows 10

Test Case – 2 (Success)

Runs - Test Plans

dev.azure.com/streamline-solutions-aadil/Streamline%20Solutions/_testManagement/runs?_a=runCharts&runId=2

Azure DevOps streamline-solutions-aadil / Streamline Solutions / Test Plans / Runs

New IP ranges are being added to the India geography for the Central India region. If your organization maintains an allowed list of Azure DevOps IPs, make sure to add these new IPs by no later than September 1st, 2023 to avoid any service disruptions. The additional IPs can be found [here](#)

Run 2 - 6 : Signup Email and Password Fields (Manual)

Run summary Test results Filter

Recent test runs

Test runs 2: 6 : Signup Email and Passwo...

Recent exploratory sessions

Summary

In progress , Running for 01 minutes 28 seconds

Run type Manual
Owner Aadil Sehrawat
Tested build not available
Release not available
Release Stage not available
Build platform not available
Build flavor not available
Test settings Run time settings
MTM lab environment not available

Comments

No comments

Error message

No error message

Attachments ()

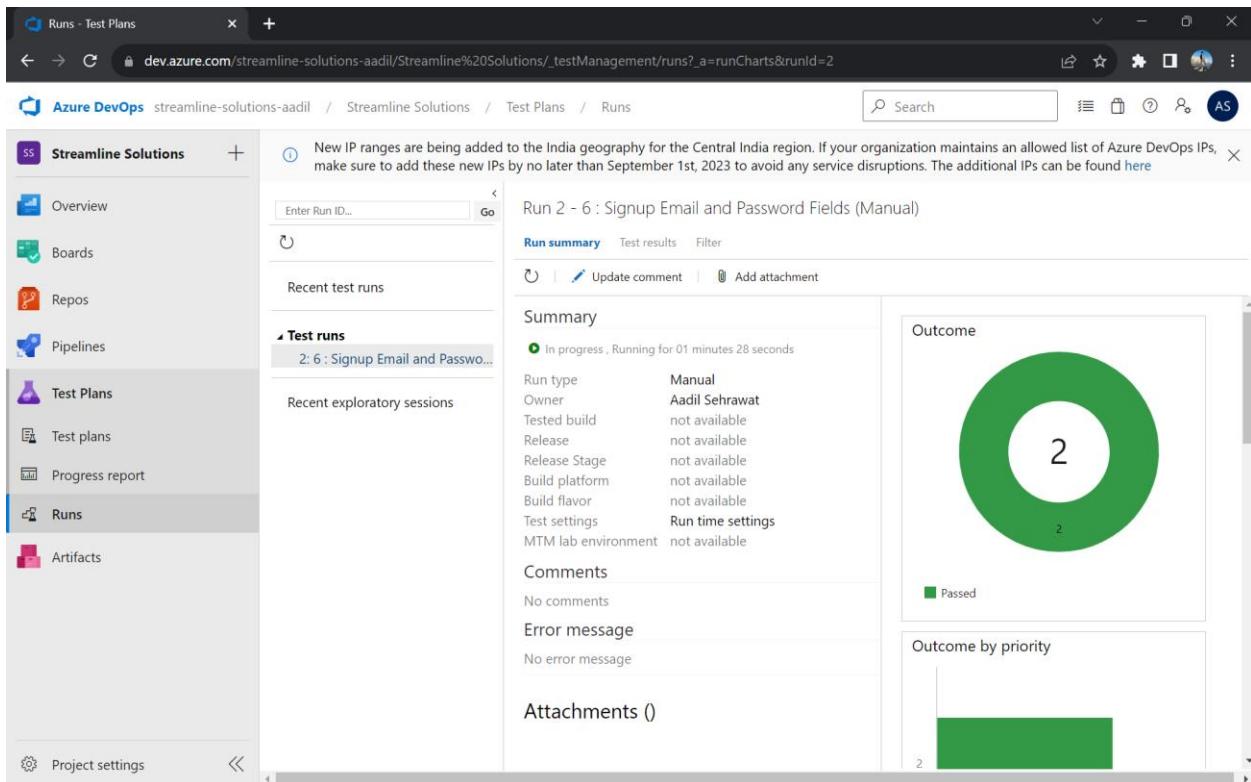
Outcome

2

Passed

Outcome by priority

2



Test Runs (In progress)

The screenshot shows the Azure DevOps interface for Streamline Solutions. The left sidebar has 'Runs' selected under 'Test Plans'. The main area displays a summary of a completed test run titled 'Run 2 - 6 : Signup Email and Password Fields (Manual)'. The summary includes details like 'Completed just now. Ran for 03 minutes 22 seconds', 'Run type: Manual', and 'Owner: Aadil Schrawat'. On the right, there's a large green circular chart showing '2' passed tests, and a bar chart for 'Outcome by priority' with one green bar labeled '2'. A message at the top notes new IP ranges being added to the India geography.

Test Runs (Completed)

The screenshot shows the Azure DevOps interface for Streamline Solutions. The left sidebar has 'Work items' selected. The main area shows a detailed view of a work item titled '21 Password meets criteria but still fails to validate'. The work item is 'Unassigned', 'New', and linked to 'Streamline Solutions\Iteration 1'. The 'Repro Steps' section contains a single step: 'Email and Password meet criteria' (Result: Failed). The 'Planning' section shows 'Story Points: 2', 'Priority: 2', 'Severity: 3 - Medium', and 'Activity'. The 'Deployment' section has a note about tracking releases. The 'Development' section has a link to an Azure Repos commit. The 'Effort (Hours)' section shows 'Original Estimate'.

Defect (Bug)

2. GITHUB ACTIVITIES

```
File Edit Selection View Go Run Terminal Help
add-on-file.txt - shell_7_foundation_Java_Spring - Visual Studio Code
EXPLORER ... add-on-file.txt
SHELL_7_FOUNDATION_JAVA... .mvn src
.editorconfig .gitattributes .gitignore
LICENSE.txt mvnw mvnw.cmd pom.xml README.md
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL
powershell + v ... ^ x
PS C:\Users\Aadil\OneDrive\Desktop\Dev\shell_7_foundation_Java_Spring> git checkout -b feature/one
Switched to a new branch 'feature/one'
PS C:\Users\Aadil\OneDrive\Desktop\Dev\shell_7_foundation_Java_Spring> git add .
PS C:\Users\Aadil\OneDrive\Desktop\Dev\shell_7_foundation_Java_Spring> git commit -m "Added feature 1"
[feature/one 74142d4] Added feature 1
Committer: Aadil KM.Sehrawat<shell.com>
Your name and email address were configured automatically based
on your username and hostname. Please check that they are accurate.
You can suppress this message by setting them explicitly:
git config --global user.name "Your Name"
git config --global user.email you@example.com
After doing this, you may fix the identity used for this commit with:
git commit --amend --reset-author
1 file changed, 1 insertion(+)
create mode 100644 add-on-file.txt
PS C:\Users\Aadil\OneDrive\Desktop\Dev\shell_7_foundation_Java_Spring> git checkout main
Switched to branch 'main'
Your branch is up to date with 'origin/main'.
PS C:\Users\Aadil\OneDrive\Desktop\Dev\shell_7_foundation_Java_Spring> git checkout -b feature/two
Switched to a new branch 'feature/two'
PS C:\Users\Aadil\OneDrive\Desktop\Dev\shell_7_foundation_Java_Spring> git add .
PS C:\Users\Aadil\OneDrive\Desktop\Dev\shell_7_foundation_Java_Spring> git commit -m "Updated colors"
[feature/two c03d7bd] Updated colors
Committer: Aadil KM.Sehrawat<shell.com>
Your name and email address were configured automatically based
on your username and hostname. Please check that they are accurate.
You can suppress this message by setting them explicitly:
```

Updating code

Shell_Foundation_FinalCaseStudy Comparing main...feature/one · a

aadilsehrawat / shell_7_foundation_Java_Spring

Type ⌥ to search

Code Pull requests Actions Projects Wiki Security Insights Settings

Open a pull request

Create a new pull request by comparing changes across two branches. If you need to, you can also [compare across forks](#).

base: main ▾ ← ... compare: feature/one ▾ ✓ Able to merge. These branches can be automatically merged.

Updated add-on-text file

Write Preview

Added a line

Attach files by dragging & dropping, selecting or pasting them.

Create pull request

Reviewers No reviews

Assignees No one—assign yourself

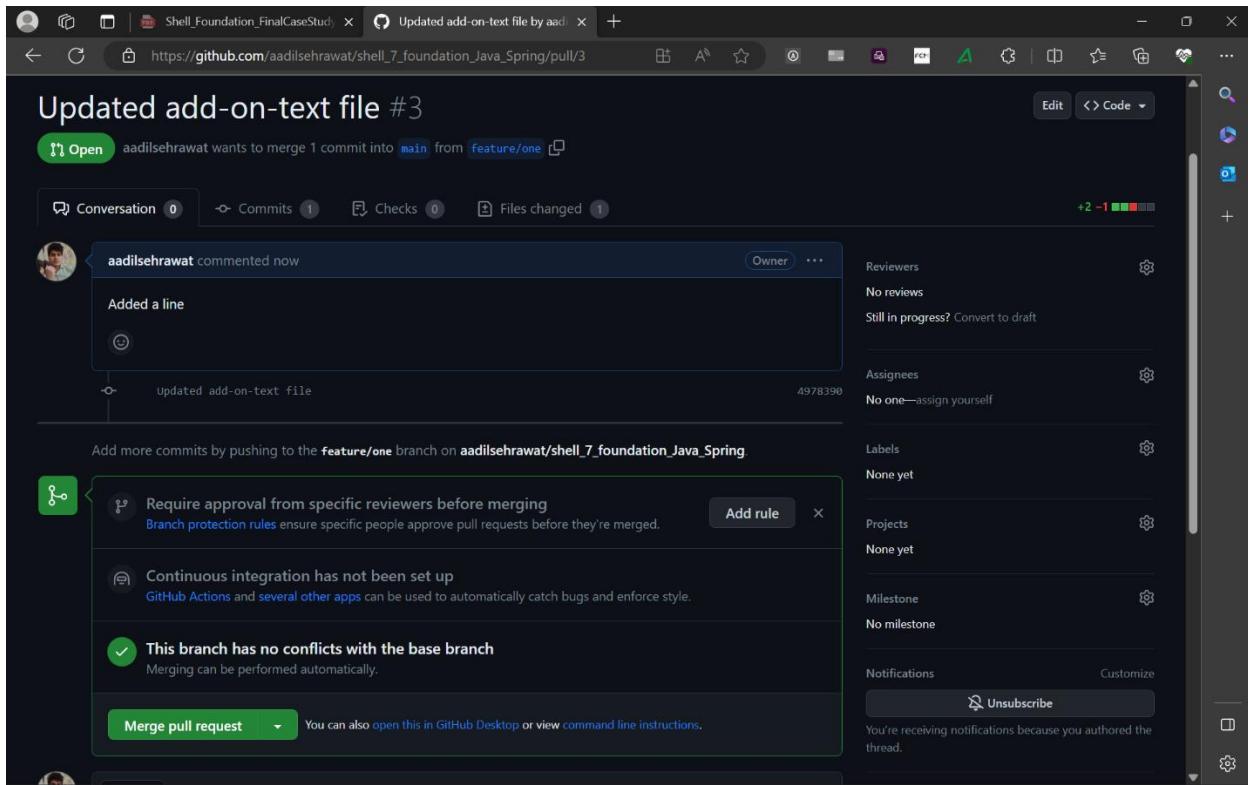
Labels None yet

Projects None yet

Milestone No milestone

Helpful resources GitHub Community Guidelines

Creating a Pull Request



Merging Pull Request

Comparing changes

Choose two branches to see what's changed or to start a new pull request. If you need to, you can also [compare across forks](#).

base: main ▾ compare: feature/one ✓ Able to merge. These branches can be automatically merged.

Discuss and review the changes in this comparison with others. [Learn about pull requests](#) Create pull request

Commits on Aug 28, 2023

Updated add-on-text file
Aadil authored and Aadil committed now

Showing 1 changed file with 2 additions and 1 deletion.

```
3 add-on-file.txt
...
@@ -1,+1,2 @@
1 - # This is an example feature - 1
2 + # This is an example feature - 1
   + # Additional Line on feature - 1
```

Comparing Changes

The screenshot shows a GitHub pull request page for a repository named 'aadilsehrawat / shell_7_foundation_Java_Spring'. The pull request is titled 'Updated add-on-text file #3' and has been merged. The merge message is 'aadilsehrawat merged 1 commit into main from feature/one now'. The commit message is 'Added a line'. The pull request details include a conversation with one comment, 1 commit, 0 checks, and 1 file changed. The right sidebar shows review, assignee, label, project, milestone, and notifications settings.

Merging the Pull Request

The screenshot shows a Visual Studio Code interface with a terminal window open. The terminal shows the output of a 'git pull' command. The output indicates that the code has been pulled from the 'feature/one' branch into the 'main' branch. The terminal window also shows the path 'PS C:\Users\Aadi\Dev\shell_7_foundation_Java_Spring>' and the command 'git pull'. The status bar at the bottom shows 'In 1, Col 1' and other standard terminal options.

Pulling the updated code

The screenshot shows a GitHub interface with the URL https://github.com/aadilsehrawat/shell_7_foundation_Java_Spring/pulls?q=is%3Apr+is%3Aclosed. The page title is "Pull requests · aadilsehrawat/shell_7_foundation_Java_Spring". The navigation bar includes "Code", "Pull requests" (selected), "Actions", "Projects", "Wiki", "Security", "Insights", and "Settings". A search bar at the top right contains the query "Type / to search". Below the search bar are buttons for "Labels 9", "Milestones 0", and "New pull request". A "Filters" dropdown is open, showing the current search query "is:pr is:closed". A "Clear current search query, filters, and sorts" button is also present. The main content area displays two closed pull requests:

- Updated colors** (#2) by aadilsehrawat was merged 5 minutes ago.
- Added feature 1** (#1) by aadilsehrawat was merged 6 minutes ago.

A "ProTip!" message at the bottom suggests using mentions with `@aadilsehrawat`.

At the bottom of the page, there is a footer with links: Terms, Privacy, Security, Status, Docs, Contact GitHub, Pricing, API, Training, Blog, and About. On the far right, there is a vertical sidebar with icons for Issues, Pull Requests, Milestones, and Settings.

Close Pull Requests

3. AZURE VM CREATION

The screenshot shows the Microsoft Azure portal interface for a virtual machine named "aadils-vm". The main pane displays the "Essentials" section with the following details:

- Resource group: newrg
- Status: Running
- Location: East US 2
- Subscription: RDBD
- Subscription ID: 3f75ed9e-ee81-4c15-a708-a5f09854b6ac
- Health state: -
- Operating system: Linux (ubuntu 22.04)
- VM availability status: Available
- Size: Standard B2s (2 vcpus, 4 GiB memory)
- Public IP address: 20.14.140.249
- Virtual network/subnet: aadils-vnet/default
- DNS name: Not configured

The left sidebar shows navigation links for Overview, Activity log, Access control (IAM), Tags, Diagnose and solve problems, Settings (Networking, Connect, Disks, Size, Microsoft Defender for Cloud, Advisor recommendations, Extensions + applications, Availability + scaling, Configuration, Identity, Properties), and a search bar.

Azure Virtual Machine Created

The screenshot shows a terminal window titled "aadils-vm - Microsoft Azure" connected to the IP address 20.14.140.249. The terminal output includes:

```
* Documentation: https://help.ubuntu.com
* Management: https://landscape.canonical.com
* Support: https://ubuntu.com/advantage

System information as of Mon Aug 28 10:27:00 UTC 2023

System load: 0.0          Processes:           112
Usage of /: 13.7% of 28.89GB   Users logged in:    1
Memory usage: 15%
Swap usage:  0%          IPv4 address for docker0: 172.17.0.1
                           IPv4 address for eth0: 10.3.0.4

Expanded Security Maintenance for Applications is not enabled.

16 updates can be applied immediately.
7 of these updates are standard security updates.
To see these additional updates run: apt list --upgradable

2 additional security updates can be applied with ESM Apps.
Learn more about enabling ESM Apps service at https://ubuntu.com/esm

Last login: Mon Aug 28 09:56:54 2023 from 134.209.166.230
```

Below the terminal, there is a "File Manager" interface showing the contents of the "/home/aadil" directory. The files listed are:

- .bash_history
- .bash_logout
- .profile
- .wget-hsts
- .viminfo

Accessing the VM using ssheasy.com

The screenshot shows a terminal session on a VM named 'aadil'. The user has cloned a GitHub repository into their home directory:

```
aadil@aadils-vm:~/dev$ git clone https://github.com/aadilsehrawat/shell_7_foundation_Java_Spring.git
Cloning into 'shell_7_foundation_Java_Spring'...
remote: Enumerating objects: 169, done.
remote: Counting objects: 100% (25/25), done.
remote: Compressing objects: 100% (19/19), done.
remote: Total 169 (delta 11), reused 6 (delta 6), pack-reused 144
Receiving objects: 100% (169/169), 451.93 KiB | 18.08 MiB/s, done.
Resolving deltas: 100% (40/40), done.
aadil@aadils-vm:~/dev$ cd shell_7_foundation_Java_Spring
aadil@aadils-vm:~/dev/shell_7_foundation_Java_Spring$ mvn install -DskipTests
```

Below the terminal, a file manager interface is shown, displaying the contents of the cloned repository in the 'home' directory. The files listed include .bash_history, .bash_logout, .profile, test, .viminfo, .docker, shell_7_foundation_Java_Spring, .sudo_as_admin, .config, and .bashrc.

Cloning the forked repository

4. MAVEN ACTIVITY

Connected to aadil@20.14.140.249

```
[INFO] including property git.remote.origin.url in results
[INFO] Writing properties file to [/home/aadil/dev/shell_7_foundation_Java_Spring/target/classes/git.properties] (for module petclinic)...
[INFO]
[INFO] --- spring-boot-maven-plugin:3.1.1:build-info (default) @ spring-petclinic ---
[INFO]
[INFO] --- maven-resources-plugin:3.3.1:resources (default-resources) @ spring-petclinic ---
[INFO] copying 3 resources from src/main/resources to target/classes
[INFO] copying 42 resources from src/main/resources to target/classes
[INFO]
[INFO] --- maven-compiler-plugin:3.11.0:compile (default-compile) @ spring-petclinic ---
[INFO] Changes detected - recompiling the module! :source
[INFO] Compiling 24 source files with javac [debug release 17] to target/classes
[INFO]
[INFO] --- maven-resources-plugin:3.3.1:testResources (default-testResources) @ spring-petclinic ---
[INFO] skip non existing resourceDirectory /home/aadil/dev/shell_7_foundation_Java_Spring/src/test/resources
[INFO]
[INFO] --- maven-compiler-plugin:3.11.0:testCompile (default-testCompile) @ spring-petclinic ---
[INFO] Changes detected - recompiling the module! :dependency
[INFO] Compiling 15 source files with javac [debug release 17] to target/test-classes
[INFO] /home/aadil/dev/shell_7_foundation_Java_Spring/src/test/java/org/springframework/samples/petclinic/vet/VetTests.java
[INFO] /home/aadil/dev/shell_7_foundation_Java_Spring/src/test/java/org/springframework/samples/petclinic/vet/VetTests.java uses
[INFO] r overrides a deprecated API.
[INFO] /home/aadil/dev/shell_7_foundation_Java_Spring/src/test/ja
```

Find Match Case Find Next Find Previous

File Manager > home > aadil

Installing Maven

The screenshot shows a terminal window at the top with Maven build logs for the 'spring-petclinic' module. Below the terminal is a file manager interface showing the contents of the user's home directory ('home'). The file manager has a blue header bar with navigation buttons and a search bar. It lists several files and folders: '.bash_history', '.bash_logout', '.profile', 'test', and '.viminfo'. The terminal window title is 'WebSSH Client' and the URL is 'ssheasy.com'. The overall interface is a web-based SSH client.

Connected to aadil@20.14.140.249

```
[INFO] --- jacoco-maven-plugin:0.8.10:report (report) @ spring-petclinic ---
[INFO] Skipping JaCoCo execution due to missing execution data file.
[INFO]
[INFO] --- maven-jar-plugin:3.3.0:jar (default-jar) @ spring-petclinic ---
[INFO] Building jar: /home/aadil/dev/shell_7_foundation_Java_Spring/target/spring-petclinic-3.1.0-SNAPSHOT.jar
[INFO]
[INFO] --- spring-boot-maven-plugin:3.1.1:repackage (repackage) @ spring-petclinic ---
[INFO] Replacing main artifact /home/aadil/dev/shell_7_foundation_Java_Spring/target/spring-petclinic-3.1.0-SNAPSHOT.jar with repackaged archive, adding nested dependencies in BOOT-INF.
[INFO] The original artifact has been renamed to /home/aadil/dev/shell_7_foundation_Java_Spring/target/spring-petclinic-3.1.0-SNAPSHOT.jar.original
[INFO]
[INFO] --- maven-install-plugin:3.1.1:install (default-install) @ spring-petclinic ---
[INFO] Installing /home/aadil/dev/shell_7_foundation_Java_Spring/pom.xml to /home/aadil/.m2/repository/org/springframework/samples/spring-petclinic/3.1.0-SNAPSHOT/spring-petclinic-3.1.0-SNAPSHOT.pom
[INFO] Installing /home/aadil/dev/shell_7_foundation_Java_Spring/target/spring-petclinic-3.1.0-SNAPSHOT.jar to /home/aadil/.m2/repository/org/springframework/samples/spring-petclinic/3.1.0-SNAPSHOT/spring-petclinic-3.1.0-SNAPSHOT.jar
[INFO]
[INFO] BUILD SUCCESS
[INFO] -----
[INFO] Total time: 7.069 s
[INFO] Finished at: 2023-08-28T08:18:04Z
[INFO] -----
```

aadil@aadils-vm:~/dev/shell_7_foundation_Java_Spring\$

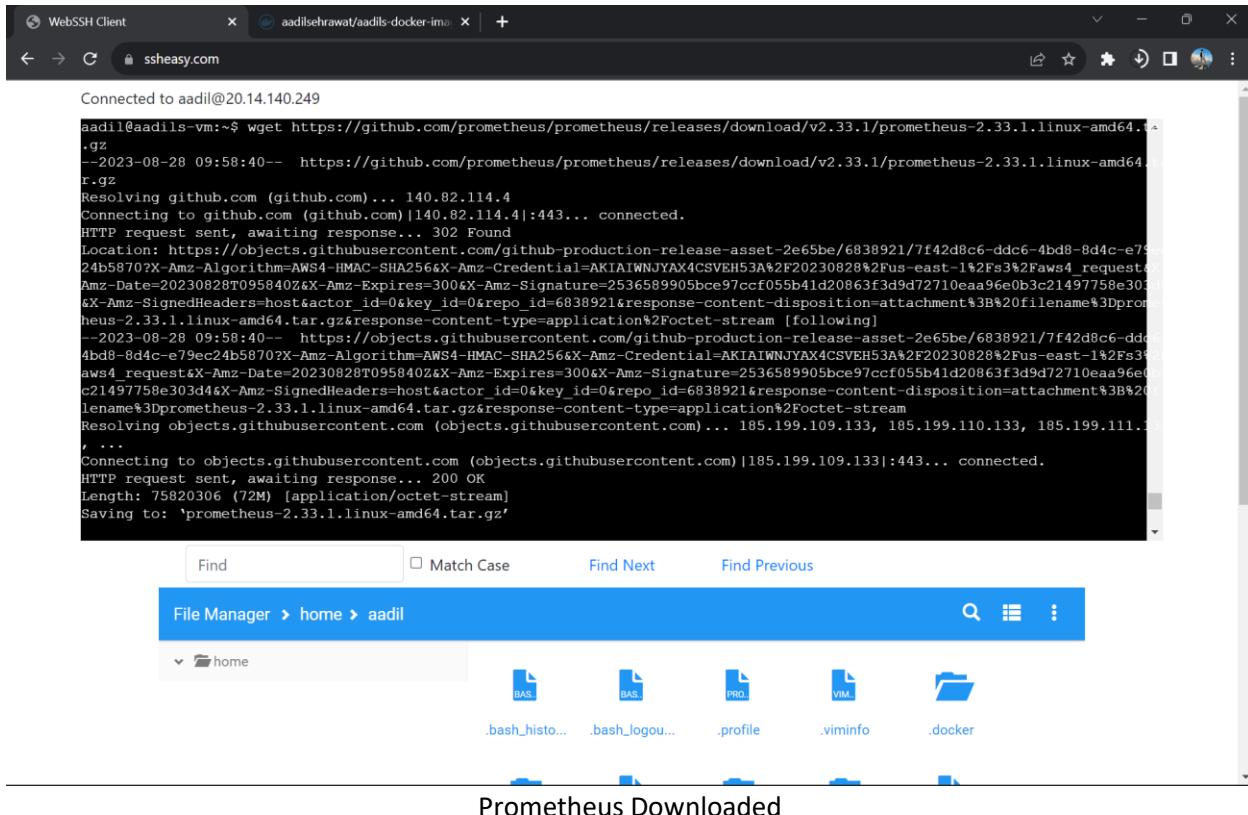
Find Match Case Find Next Find Previous

File Manager > home > aadil

Build Successful

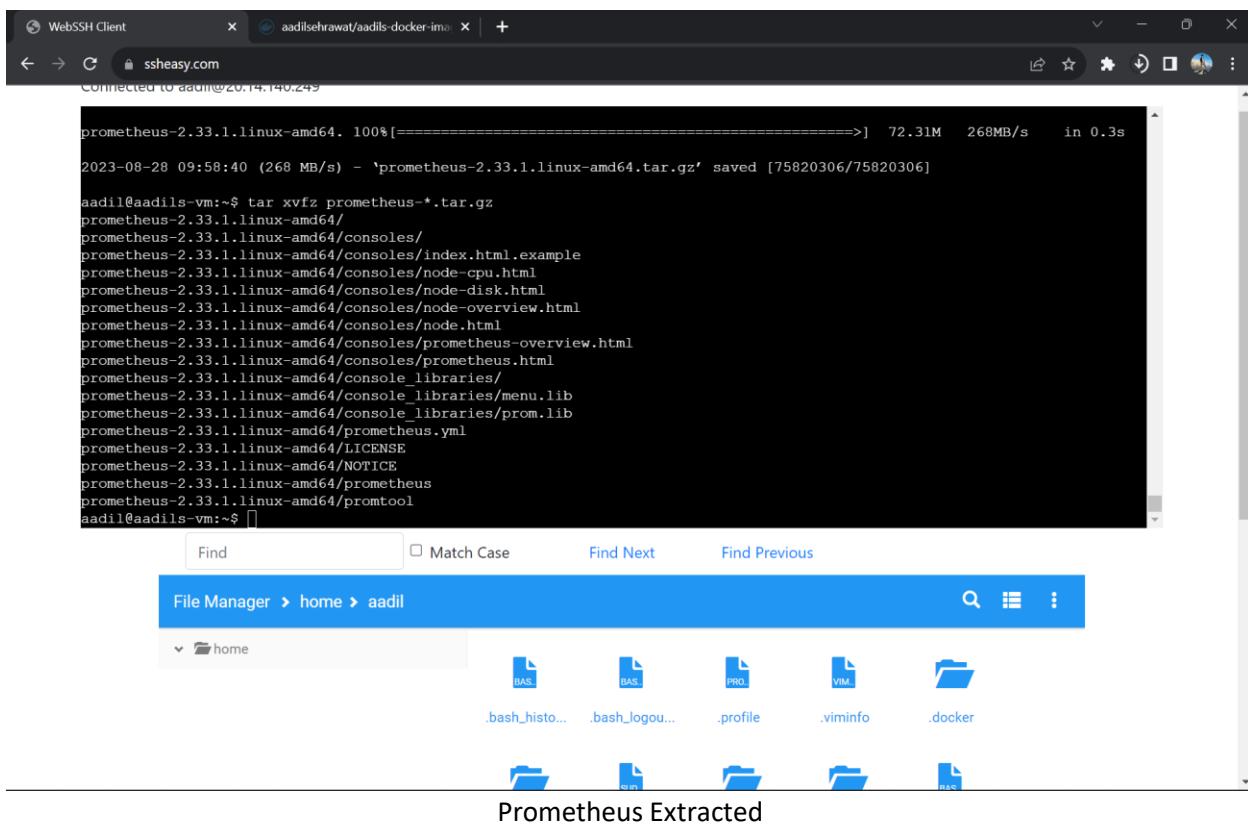
The screenshot shows a terminal window at the top with Maven build logs for the 'spring-petclinic' module. Below the terminal is a file manager interface showing the contents of the user's home directory ('home'). The file manager has a blue header bar with navigation buttons and a search bar. It lists several files and folders: '.bash_history', '.bash_logout', '.profile', 'test', and '.viminfo'. The terminal window title is 'WebSSH Client' and the URL is 'ssheeasy.com'. The overall interface is a web-based SSH client.

5. PROMETHEUS ACTIVITY



```
Connected to aadil@20.14.140.249
aadil@aadils-vm:~$ wget https://github.com/prometheus/prometheus/releases/download/v2.33.1/prometheus-2.33.1.linux-amd64.tar.gz
--2023-08-28 09:58:40-- https://github.com/prometheus/prometheus/releases/download/v2.33.1/prometheus-2.33.1.linux-amd64.t
r.gz
Resolving github.com (github.com) ... 140.82.114.4
Connecting to github.com (github.com)|140.82.114.4|:443... connected.
HTTP request sent, awaiting response... 302 Found
Location: https://objects.githubusercontent.com/github-production-release-asset-2e65be/6838921/7f42d8c6-ddc6-4bd8-8d4c-e75
24b5870?X-Amz-Algorithm=AWS4-HMAC-SHA256&X-Amz-Credential=AKIAIWNYAX4CSVEH53A%2F20230828%2Fus-east-1%2Fs3%2Faws4_reque
Amz-Date=20230828T095840Z&X-Amz-Expires=300&X-Amz-Signature=2536589905bce97ccf055b41d20863f3d9d72710eaa96e0b3c21497758e303d
&X-Amz-SignedHeaders=host&actor_id=0&key_id=0&repo_id=6838921&response-content-disposition=attachment%3B%20filename%3Dpron
heus-2.33.1.linux-amd64.tar.gz&response-content-type=application%2Foctet-stream [following]
--2023-08-28 09:58:40-- https://objects.githubusercontent.com/github-production-release-asset-2e65be/6838921/7f42d8c6-ddc6-4bd8-8d4c-e75
24b5870?X-Amz-Algorithm=AWS4-HMAC-SHA256&X-Amz-Credential=AKIAIWNYAX4CSVEH53A%2F20230828%2Fus-east-1%2Fs3%2Faws4_reque
Amz-Date=20230828T095840Z&X-Amz-Expires=300&X-Amz-Signature=2536589905bce97ccf055b41d20863f3d9d72710eaa96e0b3c21497758e303d
&X-Amz-SignedHeaders=host&actor_id=0&key_id=0&repo_id=6838921&response-content-disposition=attachment%3B%20filename%3Dpron
heus-2.33.1.linux-amd64.tar.gz&response-content-type=application%2Foctet-stream
Resolving objects.githubusercontent.com (objects.githubusercontent.com) ... 185.199.109.133, 185.199.110.133, 185.199.111.133, ...
...
Connecting to objects.githubusercontent.com (objects.githubusercontent.com)|185.199.109.133|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 75820306 (72M) [application/octet-stream]
Saving to: 'prometheus-2.33.1.linux-amd64.tar.gz'
```

Prometheus Downloaded



```
Connected to aadil@20.14.140.249
prometheus-2.33.1.linux-amd64. 100%[=====] 72.31M 268MB/s in 0.3s
2023-08-28 09:58:40 (268 MB/s) - 'prometheus-2.33.1.linux-amd64.tar.gz' saved [75820306/75820306]

aadil@aadils-vm:~$ tar xvfz prometheus-*.tar.gz
prometheus-2.33.1.linux-amd64/
prometheus-2.33.1.linux-amd64/consoles/
prometheus-2.33.1.linux-amd64/consoles/index.html.example
prometheus-2.33.1.linux-amd64/consoles/node-cpu.html
prometheus-2.33.1.linux-amd64/consoles/node-disk.html
prometheus-2.33.1.linux-amd64/consoles/node-overview.html
prometheus-2.33.1.linux-amd64/consoles/node.html
prometheus-2.33.1.linux-amd64/consoles/prometheus-overview.html
prometheus-2.33.1.linux-amd64/consoles/prometheus.html
prometheus-2.33.1.linux-amd64/console_libraries/
prometheus-2.33.1.linux-amd64/console_libraries/menu.lib
prometheus-2.33.1.linux-amd64/console_libraries/prom.lib
prometheus-2.33.1.linux-amd64/prometheus.yml
prometheus-2.33.1.linux-amd64/LICENSE
prometheus-2.33.1.linux-amd64/NOTICE
prometheus-2.33.1.linux-amd64/prometheus
prometheus-2.33.1.linux-amd64/promtool
aadil@aadils-vm:~$
```

Prometheus Extracted

Connected to aadil@10.14.140.249

```
2023-08-28 09:58:40 (268 MB/s) - 'prometheus-2.33.1.linux-amd64.tar.gz' saved [75820306/75820306]
aadil@aadils-vm:~$ tar xvfz prometheus-*.tar.gz
prometheus-2.33.1.linux-amd64/
prometheus-2.33.1.linux-amd64/consoles/
prometheus-2.33.1.linux-amd64/consoles/index.html.example
prometheus-2.33.1.linux-amd64/consoles/node-cpu.html
prometheus-2.33.1.linux-amd64/consoles/node-disk.html
prometheus-2.33.1.linux-amd64/consoles/node-overview.html
prometheus-2.33.1.linux-amd64/consoles/node.html
prometheus-2.33.1.linux-amd64/consoles/prometheus-overview.html
prometheus-2.33.1.linux-amd64/consoles/prometheus.html
prometheus-2.33.1.linux-amd64/console_libraries/
prometheus-2.33.1.linux-amd64/console_libraries/menu.lib
prometheus-2.33.1.linux-amd64/console_libraries/prom.lib
prometheus-2.33.1.linux-amd64/prometheus.yml
prometheus-2.33.1.linux-amd64/LICENSE
prometheus-2.33.1.linux-amd64/NOTICE
prometheus-2.33.1.linux-amd64/prometheus
prometheus-2.33.1.linux-amd64/promtool
aadil@aadils-vm:~$ sudo mv prometheus-2.33.1.linux-amd64/prometheus /usr/local/bin/
aadil@aadils-vm:~$ nano prometheus.yml
aadil@aadils-vm:~$ prometheus --config.file=prometheus.yml
```

Find Match Case Find Next Find Previous

File Manager > home > aadil

Running Prometheus

Connected to aadil@10.14.140.249

```
ts=2023-08-28T10:00:36.164Z caller=main.go:518 level=info host_details="(Linux 5.15.0-1041-azure #48-Ubuntu SMP Tue Jun 20 0:34:08 UTC 2023 x86_64 aadils-vm (none))"
ts=2023-08-28T10:00:36.165Z caller=main.go:519 level=info fd_limits="(soft=1024, hard=1048576)"
ts=2023-08-28T10:00:36.165Z caller=main.go:520 level=info vm_limits="(soft=unlimited, hard=unlimited)"
ts=2023-08-28T10:00:36.166Z caller=web.go:570 level=info component=web msg="Start listening for connections" address=0.0.0.0:9090
ts=2023-08-28T10:00:36.166Z caller=main.go:923 level=info msg="Starting TSDB ..."
ts=2023-08-28T10:00:36.169Z caller=head.go:493 level=info component=tsdb msg="Replaying on-disk memory mappable chunks if any"
ts=2023-08-28T10:00:36.169Z caller=head.go:527 level=info component=tsdb msg="On-disk memory mappable chunks replay completed" duration=2.1μs
ts=2023-08-28T10:00:36.169Z caller=head.go:533 level=info component=tsdb msg="Replaying WAL, this may take a while"
ts=2023-08-28T10:00:36.169Z caller=head.go:604 level=info component=tsdb msg="WAL segment loaded" segment=0 maxSegment=0
ts=2023-08-28T10:00:36.169Z caller=head.go:610 level=info component=tsdb msg="WAL replay completed" checkpoint_replay_duration=30μs wal_replay_duration=178.405μs total_replay_duration=235.206μs
ts=2023-08-28T10:00:36.170Z caller=main.go:944 level=info fs_type=EXT4 SUPER_MAGIC
ts=2023-08-28T10:00:36.170Z caller=main.go:947 level=info msg="TSDB started"
ts=2023-08-28T10:00:36.170Z caller=main.go:1128 level=info msg="Loading configuration file" filename=prometheus.yml
ts=2023-08-28T10:00:36.170Z caller=tls_config.go:195 level=info component=web msg="TLS is disabled." http2=false
ts=2023-08-28T10:00:36.178Z caller=main.go:1165 level=info msg="Completed loading of configuration file" filename=prometheus.yml totalDuration=8.014205ms db_storage=800ns remote_storage=1.4μs web_handler=400ns query_engine=900ns scrape=7.7840ms scrape_sd=26.2μs notify_sd=1.6μs notify=1.6μs notify_sd=1.7μs rules=1.6μs
ts=2023-08-28T10:00:36.178Z caller=main.go:896 level=info msg="Server is ready to receive web requests."
```

Find Match Case Find Next Find Previous

File Manager > home > aadil

Prometheus Run Successful

6. DOCKERFILE CREATION

Connected to aadil@20.14.140.249

```
FROM openjdk:17.0.2-slim
EXPOSE 80
ARG JAR=target/spring-petclinic-3.1.0-SNAPSHOT.jar
COPY $JAR /app.jar
ENTRYPOINT ["java", "-jar", "/app.jar"]
```

"Dockerfile" 6L, 146B

Find Match Case Find Next Find Previous

File Manager > home > aadil

Creating the dockerfile

This screenshot shows a terminal window within a web-based SSH client. The user has navigated to their home directory and created a Dockerfile. The file contains the standard boilerplate for a Java application using the OpenJDK 17.0.2 slim image, exposing port 80, and running the application jar. Below the terminal is a file manager interface showing a single .Dockerfile file in the current directory.

Connected to aadil@20.14.140.249

```
aadil@aadils-vm:~/shell_7 foundation_ Java_Spring$ sudo docker build -t aadil-vm -f /home/aadil/shell_7 foundation_ Java_Spring/Dockerfile .
[+] Building 22.3s (7/7) FINISHED
   => [internal] load build definition from Dockerfile
   => => transferring dockerfile: 185B
   => [internal] load .dockerrcignore
   => => transferring context: 2B
   => [internal] load metadata for docker.io/library/openjdk:17.0.2-slim
   => [internal] load build context
   => => transferring context: 57.94MB
   => [1/2] FROM docker.io/library/openjdk:17.0.2-slim@sha256:aaa3b3cb27e3e520b8f116863d0580c438ed55ecfa0bc126b41f68c3 19.1s
   => => resolve docker.io/library/openjdk:17.0.2-slim@sha256:aaa3b3cb27e3e520b8f116863d0580c438ed55ecfa0bc126b41f68c3f 0.1s
   => => sha256:aaa3b3cb27e3e520b8f116863d0580c438ed55ecfa0bc126b41f68c3f62e9774 547B / 547B
   => => sha256:779635c0e3d2d3cc8dbab2d8clee4cf2a9202e198dfcf8f40b279824d9b8e0f22 953B / 953B
   => => sha256:37cb44321d0423bc57266a3bbff658daf00478e4cdf2d3b8091f785310534256d 4.80kB / 4.80kB
   => => sha256:ife172e4850f03bb45d41a20174112bc119fbfec42a50edbdb8491aee32e3c3 31.38MB / 31.38MB
   => => sha256:44d3aa8d076675d49d85180b0ced9daef210fe4fdff4bdb422b9cf384e591d 1.58MB / 1.58MB
   => => sha256:6ce99fdf16e86bd02f6ad66ae0e1334878528b5a4b5487850a76e0c08a7a27d56 187.90MB / 187.90MB
   => => extracting sha256:ife172e4850f03bb45d41a20174112bc119fbfec42a650edb8491aee32e3c3 1.5s
   => => extracting sha256:44d3aa8d076675d49d85180b0ced9daef210fe4fdff4bdb422b9cf384e591d0 0.1s
   => => extracting sha256:6ce99fdf16e86bd02f6ad66ae0e1334878528b5a4b5487850a76e0c08a7a27d56 2.1s
   => [2/2] COPY target/spring-petclinic-3.1.0-SNAPSHOT.jar /app.jar
   => exporting to image
   => exporting layers
```

Find Match Case Find Next Find Previous

File Manager > home

aadil

Docker image build successful

This screenshot shows the completion of a Docker build command. The output log indicates the successful download of the base image, compilation of the Java code, and copying of the application jar into the container image. The final message "Docker image build successful" is displayed at the bottom.

The screenshot shows a terminal window and a file manager interface. The terminal window at the top displays a series of commands being run on a Linux system, specifically pushing a Docker image to the Docker Hub. The command used is:

```
aadil@aadils-vm:~/shell_7_foundation_Java_Spring$ docker push aadilsehrawat/aadils-docker-image:latest
```

The output shows that the repository already exists, and the new layer is being pushed. The final digest is displayed as:

```
The push refers to repository [docke.../aadilsehrawat/aadils-docker-image]
```

The file manager below shows the contents of the user's home directory, specifically the .ssh folder. The contents of the .ssh folder are:

- .bash_history
- .bash_logout
- .profile
- test
- .viminfo

Below the file manager, a horizontal bar indicates the text "Docker image pushed on docker hub".

Docker image pushed on docker hub

7. AZURE WEB-APP CREATION

The screenshot shows the 'Create Web App' wizard in the Microsoft Azure portal. The title bar says 'Create Web App - Microsoft Azure'. The URL in the address bar is 'portal.azure.com/#create/Microsoft.WebSite'. The main header is 'Create Web App' with a '... more' link. Below it, there's a navigation bar with tabs: Basics (which is selected), Docker, Networking, Monitoring, Tags, and Review + create.

The 'Basics' tab content includes a brief introduction about App Service Web Apps: 'App Service Web Apps lets you quickly build, deploy, and scale enterprise-grade web, mobile, and API apps running on any platform. Meet rigorous performance, scalability, security and compliance requirements while using a fully managed platform to perform infrastructure maintenance.' It also links to 'Learn more'.

Project Details: A note says 'Select a subscription to manage deployed resources and costs. Use resource groups like folders to organize and manage all your resources.' Below this, there are dropdown menus for 'Subscription' (set to 'RDBD') and 'Resource Group' (set to 'newrg'), with a 'Create new' link.

Instance Details: A note says 'Need a database? Try the new Web + Database experience.' Below this, there are fields for 'Name' (set to 'StreamlineSolutio'), 'Publish' (set to 'Docker Container'), and 'Operating System' (set to 'Linux').

At the bottom, there are three buttons: 'Review + create' (highlighted in blue), '< Previous', and 'Next : Docker >'.

Creating a WebApp

8. AZURE WEB-APP DEPLOYMENT

The screenshot shows the Microsoft Web App Portal for the application "Microsoft.Web-WebApp-Portal-4be0ff2c-afaf". The main message is "Your deployment is complete". Deployment details include a deployment name, subscription (RDBB), and resource group (newrg). A correlation ID is also provided. There are sections for "Deployment details" and "Next steps", along with links to "Go to resource", "Give feedback", and "Tell us about your experience with deployment". On the right, there are promotional cards for "Cost Management", "Microsoft Defender for Cloud", and "Work with an expert".

Azure Web App Created/Deployed

The screenshot shows the StreamlineSolutions Deployment Center for a Web App. The "Deployment Center" tab is selected in the sidebar. The "Settings" tab is active. Under "Source", it shows GitHub as the provider with a "Disconnect" button. The "GitHub Actions" section lists "Signed in as" (aadilsehrawat), "Organization" (aadilsehrawat), "Repository" (shell_7_foundation_Java_Spring), and "Branch" (main). The "Registry settings" section shows "Build provider" (GitHub Actions), "Server URL" (https://index.docker.io/v1), and "Login" (aadilsehrawat). The "Full Image Name and Tag" field is set to "aadils-docker-image:latest".

Connecting with Github for Deployment

9. TESTING THE OUTPUT

Screenshot of the Microsoft Azure portal showing the StreamlineSolutions Web App configuration page.

The URL in the browser is: <https://portal.azure.com/#@ravinsofttech.com/resource/subscriptions/3f75ed9e-ee81-4c15-a708-a5f09854b6ac/resourceGroups/newrg/providers/Microsoft.Web/sites/StreamlineSolutions/appServices>

Essentials (JSON View)

Resource group (move) : newrg	Default domain : streamlinesolutions.azurewebsites.net
Status : Running	App Service Plan : ASP-newrg-ad66 (F1: 1)
Location (move) : East US 2	Operating System : Linux
Subscription (move) : RDDB	Health Check : Not Configured
Subscription ID : 3f75ed9e-ee81-4c15-a708-a5f09854b6ac	GitHub Project : https://github.com/aadilsehrawat/shell_7_foundation
Tags (edit) : Add tags	

Properties Monitoring Logs Capabilities Notifications Recommendations

Web app

Name	StreamlineSolutions
Publishing model	Container
Container Image	aadilsehrawat/aadils-docker-image:latest

Domains

Default domain	streamlinesolutions.azurewebsites.net
Custom domain	Add custom domain

Web App Status – Running

Screenshot of a web browser showing the StreamlineSolutions Azure website.

The URL in the browser is: streamlinesolutions.azurewebsites.net

The page displays the Spring logo and navigation links: HOME, FIND OWNERS, VETERINARIANS, and ERROR.

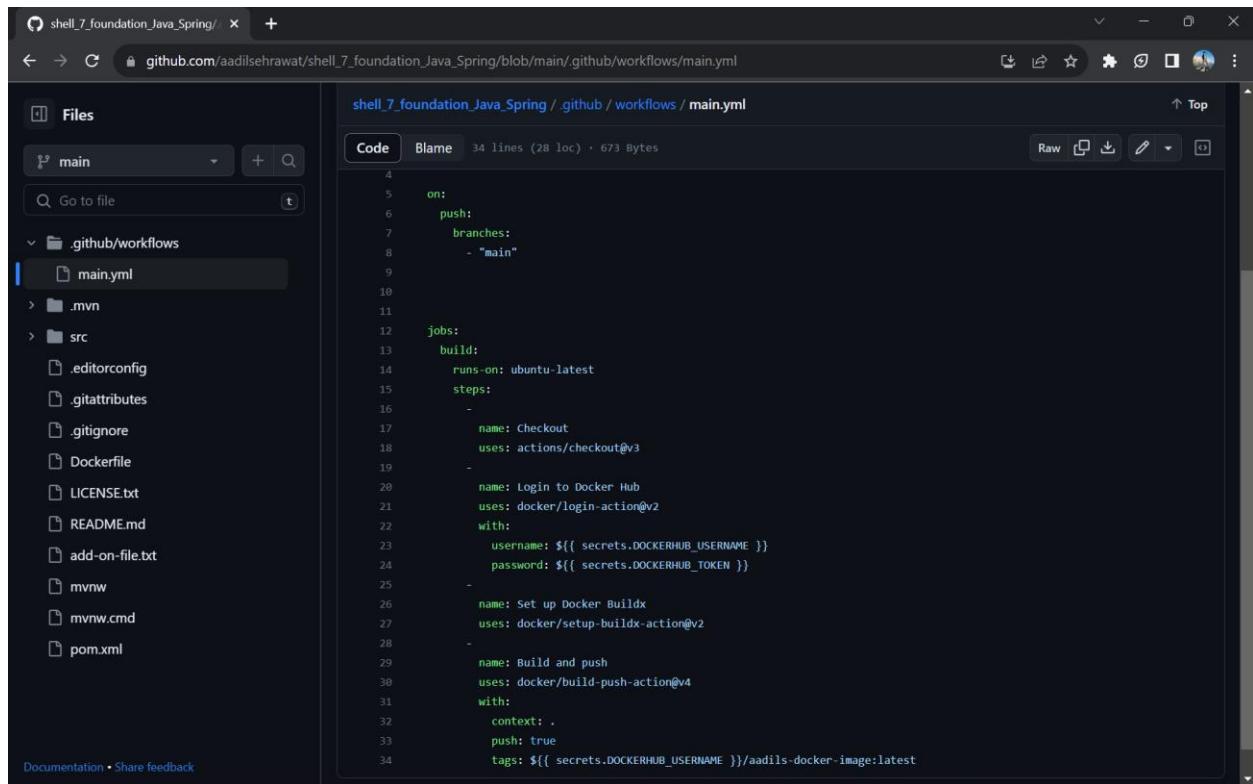
Welcome



 **spring** by VMware Tanzu

Deployed test web-app on azure

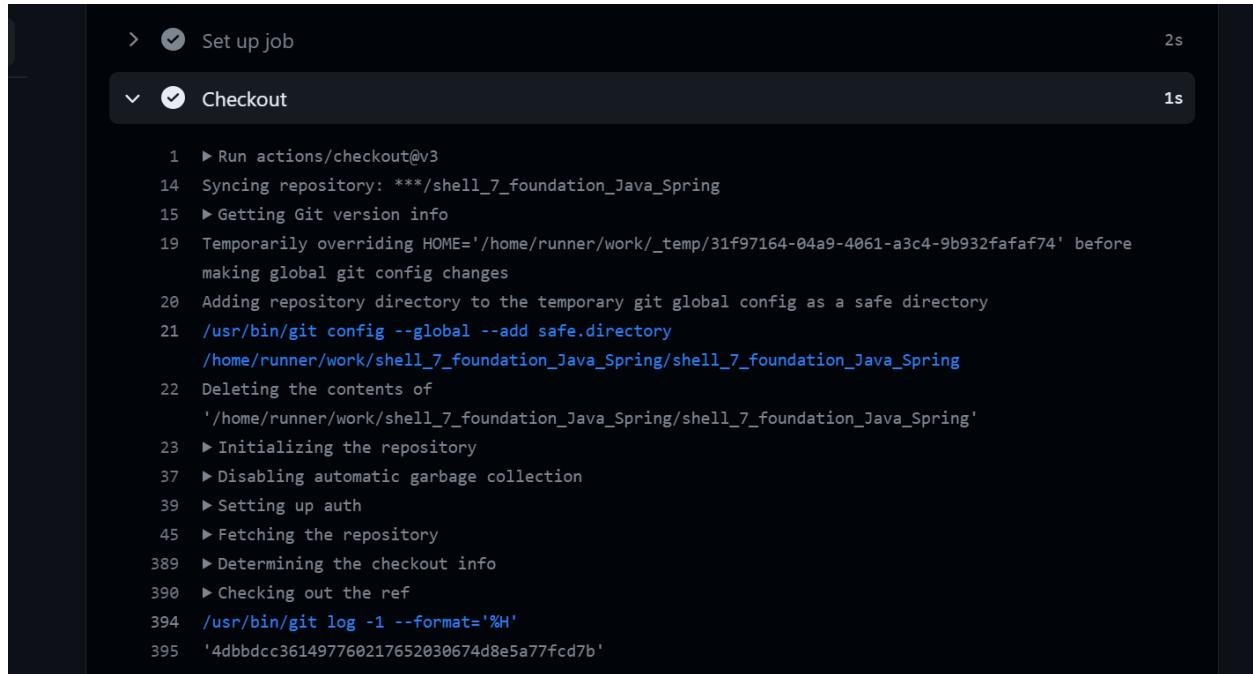
10. GITHUB ACTIONS



The screenshot shows a GitHub repository named "shell_7_foundation_Java_Spring". The "main" branch is selected. In the left sidebar, there's a "Files" section with a search bar and a "main" folder expanded, showing files like ".github/workflows/main.yml", ".mvn", "src", ".editorconfig", ".gitattributes", ".gitignore", "Dockerfile", "LICENSE.txt", "README.md", "add-on-file.txt", "mvnw", "mvnw.cmd", and "pom.xml". The right pane displays the content of the "main.yml" workflow file.

```
shell_7_foundation_Java_Spring/.github/workflows/main.yml
Code Blame 34 lines (28 loc) · 673 Bytes
on:
  push:
    branches:
      - "main"
jobs:
  build:
    runs-on: ubuntu-latest
    steps:
      -
        name: Checkout
        uses: actions/checkout@v3
      -
        name: Login to Docker Hub
        uses: docker/login-action@v2
        with:
          username: ${{ secrets.DOCKERHUB_USERNAME }}
          password: ${{ secrets.DOCKERHUB_TOKEN }}
      -
        name: Set up Docker Buildx
        uses: docker/setup-buildx-action@v2
      -
        name: Build and push
        uses: docker/build-push-action@v4
        with:
          context: .
          push: true
          tags: ${{ secrets.DOCKERHUB_USERNAME }}/aadils-docker-image:latest
```

Github workflow .yml file



The screenshot shows a GitHub Actions job log for the "Checkout" step. It includes a progress bar at the top indicating the step is 1s out of 2s. The log output shows the execution of the "actions/checkout@v3" action, including syncing the repository, getting Git version info, temporarily overriding HOME, adding a global git config directory, deleting local repository contents, initializing the repository, disabling automatic garbage collection, setting up authentication, fetching the repository, determining checkout info, checking out the ref, and finally running a git log command.

```
> ⚡ Set up job
  ✓ Checkout 1s
  ▶ Run actions/checkout@v3
14 Syncing repository: ***/shell_7_foundation_Java_Spring
15 ▶ Getting Git version info
19 Temporarily overriding HOME='"/home/runner/work/_temp/31f97164-04a9-4061-a3c4-9b932fafaf74"' before
making global git config changes
20 Adding repository directory to the temporary git global config as a safe directory
21 /usr/bin/git config --global --add safe.directory
/home/runner/work/shell_7_foundation_Java_Spring/shell_7_foundation_Java_Spring
22 Deleting the contents of
'/home/runner/work/shell_7_foundation_Java_Spring/shell_7_foundation_Java_Spring'
23 ▶ Initializing the repository
37 ▶ Disabling automatic garbage collection
39 ▶ Setting up auth
45 ▶ Fetching the repository
389 ▶ Determining the checkout info
390 ▶ Checking out the ref
394 /usr/bin/git log -1 --format='%H'
395 '4dbbdcc361497760217652030674d8e5a77fcfd7b'
```

Github Actions Jobs Running

The screenshot shows a GitHub Actions job named "Create main.yml #1". The job has a status of "Succeeded" and was completed 7 hours ago in 24s. The build step is expanded, showing the following steps:

- > Set up job 3s
- > Checkout 1s
- > Login to Docker Hub 1s
- > Set up Docker Buildx 5s
- > Build and push 10s
- > Post Build and push 0s
- > Post Set up Docker Buildx 0s
- > Post Login to Docker Hub 0s
- > Post Checkout 0s
- > Complete job 0s

There are links for "Run details", "Usage", and "Workflow file". A "Re-run all jobs" button is at the top right.

Github Actions Jobs Completed

The screenshot shows the expanded "Post Checkout" step from the previous screenshot. It contains the following log output:

```
1 Post job cleanup.
2 /usr/bin/git version
3 git version 2.41.0
4 Temporarily overriding HOME='/home/runners/work/_temp/dd908d0e-e1dd-4ca8-802c-30d97ec0e910' before
   making global git config changes
5 Adding repository directory to the temporary git global config as a safe directory
6 /usr/bin/git config --global --add safe.directory
   /home/runners/work/shell_7_foundation_Java_Spring/shell_7_foundation_Java_Spring
7 /usr/bin/git config --local --name-only --get-regexp core\\.sshCommand
8 /usr/bin/git submodule foreach --recursive sh -c "git config --local --name-only --get-regexp
   'core\\.sshCommand' && git config --local --unset-all 'core.sshCommand' || :"
9 /usr/bin/git config --local --name-only --get-regexp http\\.https:\\\\github\\.com\\\\.extraheader
10 http\\.https://github\\.com/.extraheader
11 /usr/bin/git config --local --unset-all http\\.https://github\\.com/.extraheader
12 /usr/bin/git submodule foreach --recursive sh -c "git config --local --name-only --get-regexp
   'http\\.https:\\\\github\\.com\\\\.extraheader' && git config --local --unset-all
   'http\\.https://github\\.com/.extraheader' || :"
```

The step completed successfully in 0s.

Github Actions Jobs Completed

The screenshot shows the GitHub Actions CI pipeline for a repository. The top navigation bar includes Code, Issues, Pull requests, Actions (which is selected), Projects, Wiki, Security, Insights, and Settings. Below the navigation, there's a summary of the CI status with a green checkmark and the text "Create main.yml #1". A "Re-run all jobs" button and a three-dot menu are also present. The main content area is titled "Workflow file for this run" and displays the .github/workflows/main.yml file content:

```
1 name: ci
2
3 on:
4   push:
5     branches:
6       - "main"
7
8 jobs:
9   build:
10    runs-on: ubuntu-latest
11    steps:
12      -
13        name: Checkout
14        uses: actions/checkout@v3
15      -
16        name: Login to Docker Hub
17        uses: docker/login-action@v2
18        with:
19          username: ${{ secrets.DOCKERHUB_USERNAME }}
20          password: ${{ secrets.DOCKERHUB_TOKEN }}
21      -
22        name: Set up Docker Buildx
```

Github Actions Workflow File

The screenshot shows the GitHub Actions CI pipeline after the workflow has completed. The top navigation bar and CI status summary are identical to the previous screenshot. The main content area now displays the completed workflow details:

Triggered via push 7 hours ago	Status	Total duration	Artifacts
aadilsehrawat pushed -> f12b7dd main	Success	35s	-

Below this, the workflow summary for "main.yml" is shown, indicating it ran on "push" and contained a single job named "build" which took 24s to complete. There are also icons for expanding or collapsing the workflow and adding new jobs.

Github Actions Workflow Completed