

What is HEROKU?

Heroku is a container-based cloud Platform as a Service (PaaS). Developers use Heroku to *deploy, manage, and scale modern apps*. It is *elegant, flexible, and easy to use*, offering developers the simplest path to getting their apps to market.

Steps to deploy an app on HEROKU:

1. *Create* an app
2. *Initialize* a git repository
3. *Create* Heroku app
4. Git *commit* files and Git *push*

App is ready! 😊



1. Create an app



The screenshot shows the Visual Studio Code interface with a Python project named 'DTL Project'. The Explorer sidebar on the left shows the project structure: 'env', 'static', 'templates', and 'index.html'. The main editor area displays the 'app.py' file, which contains the following code:

```
1 from re import template
2 from flask import Flask, render_template
3
4 app = Flask(__name__)
5
6 @app.route("/")
7 def hello_world():
8     return render_template('index.html')
9     # return "<p>Main Page</p>"
10
11 @app.route("/profile")
12 def profile():
13     return 'Profile page'
14     You, 3 hours ago • first commit
15 if __name__ == "__main__":
16     app.run(debug=True, port=8000)
```

The status bar at the bottom indicates the file is 'You, 3 hours ago', line 14, column 1, with 4 spaces, UTF-8 encoding, CRLF line endings, and Python syntax highlighting. The Prettier formatter is also active.

2. Initialize a git repository

A screenshot of the Visual Studio Code interface. The Explorer sidebar on the left shows a project named "DTL PROJECT" with files like "env", "static", "templates", "app.py", "Procfile", and "requirements.txt". The main area is a terminal window titled "requirements.txt - DTL Project - Visual Studio Code". It shows a Windows PowerShell session where the user initializes a Git repository, logs into Heroku, sets a remote, and installs dependencies like gunicorn and flask using pip. The status bar at the bottom shows "You, an hour ago", "Ln 10, Col 1 (2 selected)", "Spaces: 4", "UTF-16 LE", "CRLF", "pip requirements", and "Prettier".

```
Windows PowerShell
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Install the latest PowerShell for new features and improvements! https://aka.ms/PSWindows

PS C:\Users\Anuj\Desktop\DTL Project> & "c:/Users/Anuj/Desktop/DTL Project/env/Scripts/Activate.ps1"
(env) PS C:\Users\Anuj\Desktop\DTL Project> pip freeze > requirements.txt
(env) PS C:\Users\Anuj\Desktop\DTL Project> git init
Reinitialized existing Git repository in C:/Users/Anuj/Desktop/DTL Project/.git/
(env) PS C:\Users\Anuj\Desktop\DTL Project> heroku login
heroku: Press any key to open up the browser to login or q to exit:
Opening browser to https://cli-auth.heroku.com/auth/cli/browser/06efea14-cbd4-465a-a7f7-defde965c572?requestor=SFMyNTY.g2gDbQAAAA4xMTcuOTk
uMjU1LjI0NW4GAihFOyZ_AWIAAVGA.Gd4i9QhmeBfSigH6Efkyt-tee5t05UvH1Et1QtCK1SA
Error: spawn cmd ENOENT
Code: ENOENT
» Warning: Cannot open browser.
Logging in... done
Logged in as anujmohite001@gmail.com
(env) PS C:\Users\Anuj\Desktop\DTL Project> heroku git:remote -flask dtl-project-142103002
» Error: Couldn't find that app.
»
» Error ID: not_found
(env) PS C:\Users\Anuj\Desktop\DTL Project> heroku git:remote -a dtl-project-142103002
set git remote heroku to https://git.heroku.com/dtl-project-142103002.git
(env) PS C:\Users\Anuj\Desktop\DTL Project> pip install gunicorn
Collecting gunicorn
Using cached gunicorn-20.1.0-py3-none-any.whl (79 kB)
Requirement already satisfied: setuptools>=3.0 in c:\users\anuj\desktop\dtl project\env\lib\site-packages (from gunicorn) (60.5.0)
Installing collected packages: gunicorn
Successfully installed gunicorn-20.1.0
WARNING: You are using pip version 21.3.1; however, version 22.0.3 is available.
You should consider upgrading via the 'C:\Users\Anuj\Desktop\DTL Project\env\Scripts\python.exe -m pip install --upgrade pip' command.
(env) PS C:\Users\Anuj\Desktop\DTL Project> pip freeze > requirements.txt
(env) PS C:\Users\Anuj\Desktop\DTL Project> pip install flask
Collecting flask
Downloading Flask-2.0.3-py3-none-any.whl (95 kB)
```


3. Create heroku app

The screenshot shows the Heroku dashboard in a web browser. The browser's address bar displays 'dashboard.heroku.com/apps'. The page header includes the Heroku logo, a search bar with the text 'Jump to Favorites, Apps, Pipelines, Spaces...', and a 'Salesforce Platform' link. Below the header, there's a navigation bar with 'Personal' selected and a 'New' button. A purple banner with a sun and mountain illustration contains the text 'Welcome to Heroku' and 'Now that your account has been set up, here's how to get started.', with a 'Dismiss' button. Below the banner is a search bar labeled 'Filter apps and pipelines'. The main content area shows a single app entry: 'dtl-project-142103002', which is a Python app named 'heroku-20' located in the 'United States'. The footer contains links for 'heroku.com', 'Blogs', 'Careers', 'Documentation', and a 'Support' button, along with 'Terms of Service', 'Privacy', 'Cookies', and a copyright notice for 2022 Salesforce.com.

Personal apps | Heroku

dashboard.heroku.com/apps

Apps Gmail Dashboard Mail - ANUJ RAJES... WhatsApp My College | Signup CSI COEP Sem 3 Re... Reading list

Salesforce Platform

HEROKU

Jump to Favorites, Apps, Pipelines, Spaces...

Personal New

Welcome to Heroku
Now that your account has been set up, here's how to get started.

Dismiss

Show next steps

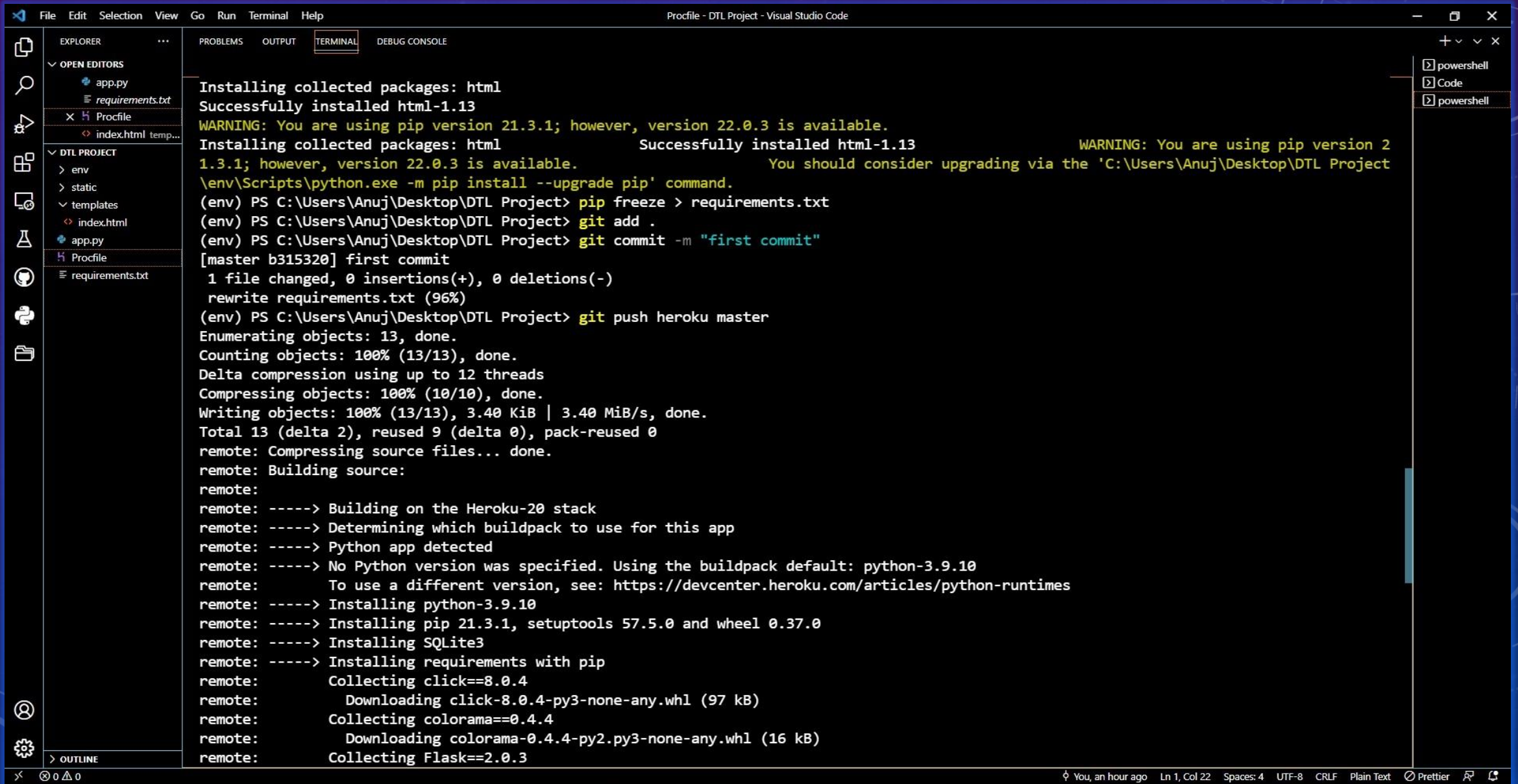
Filter apps and pipelines

dtl-project-142103002 Python • heroku-20 • United States

heroku.com Blogs Careers Documentation Support

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4. Git commit files and push



The screenshot shows the Visual Studio Code interface with a terminal window open. The terminal displays the output of a series of commands used to install dependencies, commit files, and push the code to Heroku. The Explorer sidebar on the left shows the project structure, including files like `app.py`, `requirements.txt`, `Procfile`, and `index.html`. The terminal output includes warnings about pip version and a detailed log of the Heroku deployment process.

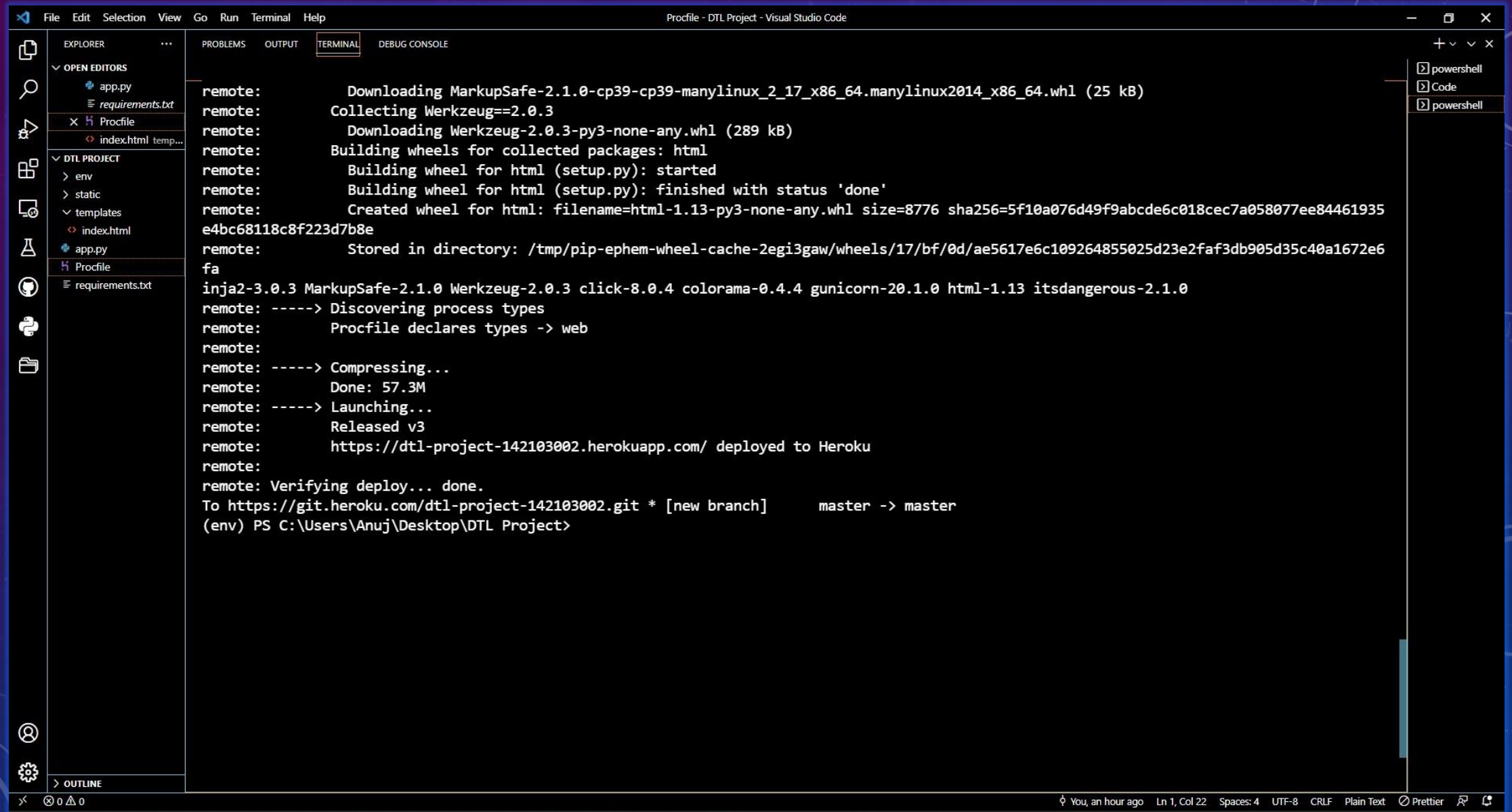
```
File Edit Selection View Go Run Terminal Help
Profile - DTL Project - Visual Studio Code

EXPLORER
  OPEN EDITORS
    app.py
    requirements.txt
    Procfile
    index.html temp...
  DTL PROJECT
    env
    static
    templates
    index.html
    app.py
    Procfile
    requirements.txt

PROBLEMS OUTPUT TERMINAL DEBUG CONSOLE

Installing collected packages: html
Successfully installed html-1.13
WARNING: You are using pip version 21.3.1; however, version 22.0.3 is available.
Installing collected packages: html
Successfully installed html-1.13
WARNING: You are using pip version 2
You should consider upgrading via the 'C:\Users\Anuj\Desktop\DTL Project
\env\Scripts\python.exe -m pip install --upgrade pip' command.
(env) PS C:\Users\Anuj\Desktop\DTL Project> pip freeze > requirements.txt
(env) PS C:\Users\Anuj\Desktop\DTL Project> git add .
(env) PS C:\Users\Anuj\Desktop\DTL Project> git commit -m "first commit"
[master b315320] first commit
 1 file changed, 0 insertions(+), 0 deletions(-)
 rewrite requirements.txt (96%)
(env) PS C:\Users\Anuj\Desktop\DTL Project> git push heroku master
Enumerating objects: 13, done.
Counting objects: 100% (13/13), done.
Delta compression using up to 12 threads
Compressing objects: 100% (10/10), done.
Writing objects: 100% (13/13), 3.40 KiB | 3.40 MiB/s, done.
Total 13 (delta 2), reused 9 (delta 0), pack-reused 0
remote: Compressing source files... done.
remote: Building source:
remote:
remote: -----> Building on the Heroku-20 stack
remote: -----> Determining which buildpack to use for this app
remote: -----> Python app detected
remote: -----> No Python version was specified. Using the buildpack default: python-3.9.10
remote:       To use a different version, see: https://devcenter.heroku.com/articles/python-runtimes
remote: -----> Installing python-3.9.10
remote: -----> Installing pip 21.3.1, setuptools 57.5.0 and wheel 0.37.0
remote: -----> Installing SQLite3
remote: -----> Installing requirements with pip
remote:       Collecting click==8.0.4
remote:       Downloading click-8.0.4-py3-none-any.whl (97 kB)
remote:       Collecting colorama==0.4.4
remote:       Downloading colorama-0.4.4-py2.py3-none-any.whl (16 kB)
remote:       Collecting Flask==2.0.3
```

App is deployed



The screenshot shows the Visual Studio Code interface with a terminal window open. The terminal displays the output of a deployment script, showing the process of downloading dependencies, building wheels, and deploying the application to Heroku. The Explorer sidebar on the left shows the project structure, including files like app.py, requirements.txt, Procfile, and index.html. The Output window on the right shows the deployment logs.

```
File Edit Selection View Go Run Terminal Help
Procfile - DTL Project - Visual Studio Code

EXPLORER
OPEN EDITORS
  app.py
  requirements.txt
  Procfile
  index.html temp...
DTL PROJECT
  env
  static
  templates
  index.html
  app.py
  Procfile
  requirements.txt
OUTLINE

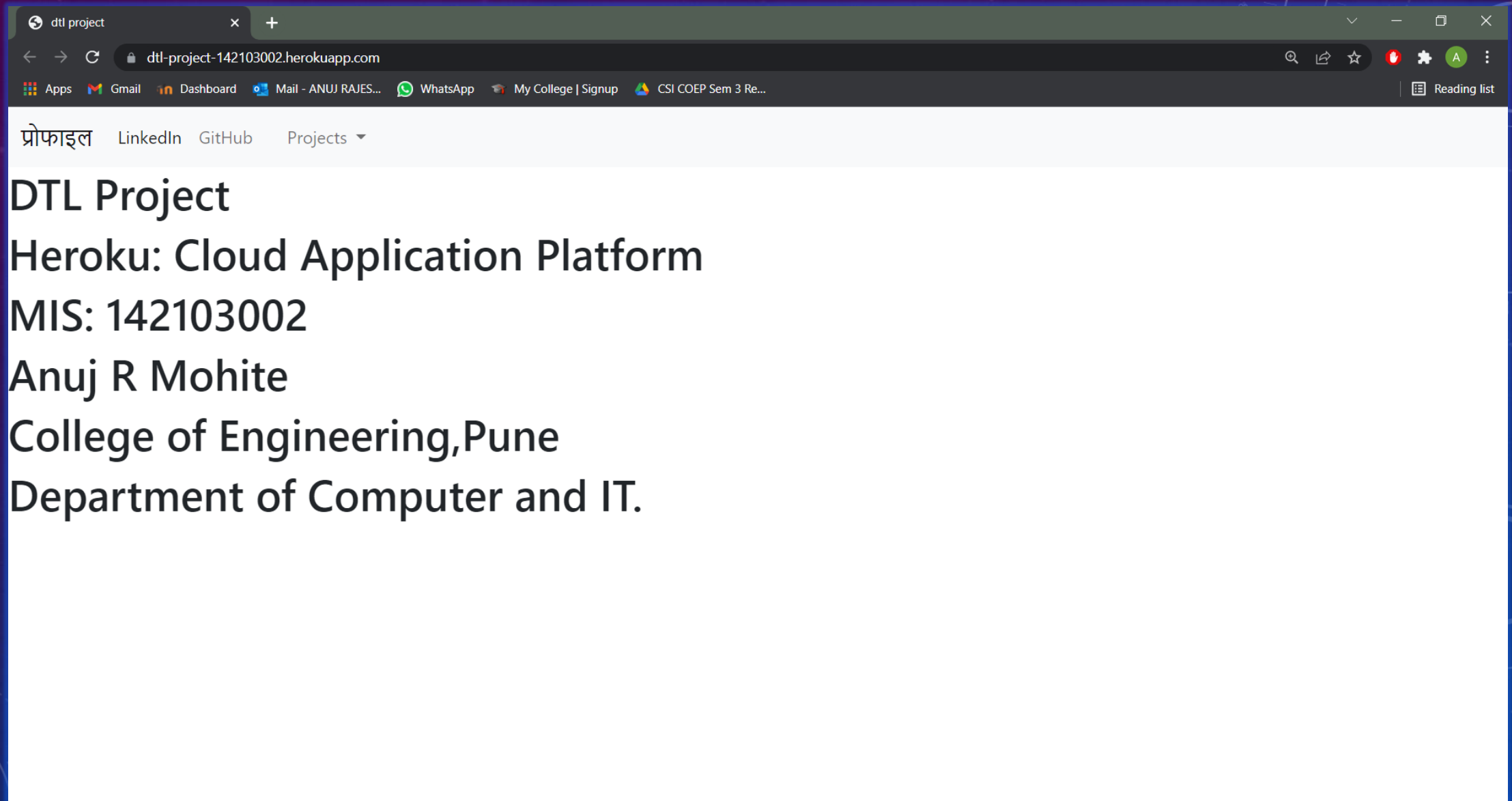
PROBLEMS OUTPUT TERMINAL DEBUG CONSOLE

remote:      Downloading MarkupSafe-2.1.0-cp39-cp39-manylinux_2_17_x86_64.manylinux2014_x86_64.whl (25 kB)
remote:      Collecting Werkzeug==2.0.3
remote:      Downloading Werkzeug-2.0.3-py3-none-any.whl (289 kB)
remote:      Building wheels for collected packages: html
remote:      Building wheel for html (setup.py): started
remote:      Building wheel for html (setup.py): finished with status 'done'
remote:      Created wheel for html: filename=html-1.13-py3-none-any.whl size=8776 sha256=5f10a076d49f9abcde6c018cec7a058077ee84461935e4bc68118c8f223d7b8e
remote:      Stored in directory: /tmp/pip-ephem-wheel-cache-2egi3gaw/wheels/17/bf/0d/ae5617e6c109264855025d23e2faf3db905d35c40a1672e6fa
remote:     inja2-3.0.3 MarkupSafe-2.1.0 Werkzeug-2.0.3 click-8.0.4 colorama-0.4.4 gunicorn-20.1.0 html-1.13 itsdangerous-2.1.0
remote:      -----> Discovering process types
remote:      Procfile declares types -> web
remote:
remote:      -----> Compressing...
remote:      Done: 57.3M
remote:      -----> Launching...
remote:      Released v3
remote:      https://dtl-project-142103002.herokuapp.com/ deployed to Heroku
remote:
remote: Verifying deploy... done.
To https://git.heroku.com/dtl-project-142103002.git * [new branch]      master -> master
(env) PS C:\Users\Anuj\Desktop\DTL Project>
```

powerShell
Code
powerShell

You, an hour ago Ln 1, Col 22 Spaces: 4 UTF-8 CRLF Plain Text Prettier

URL: <https://dtl-project-142103002.herokuapp.com/>



`print("Thank_you!")`