

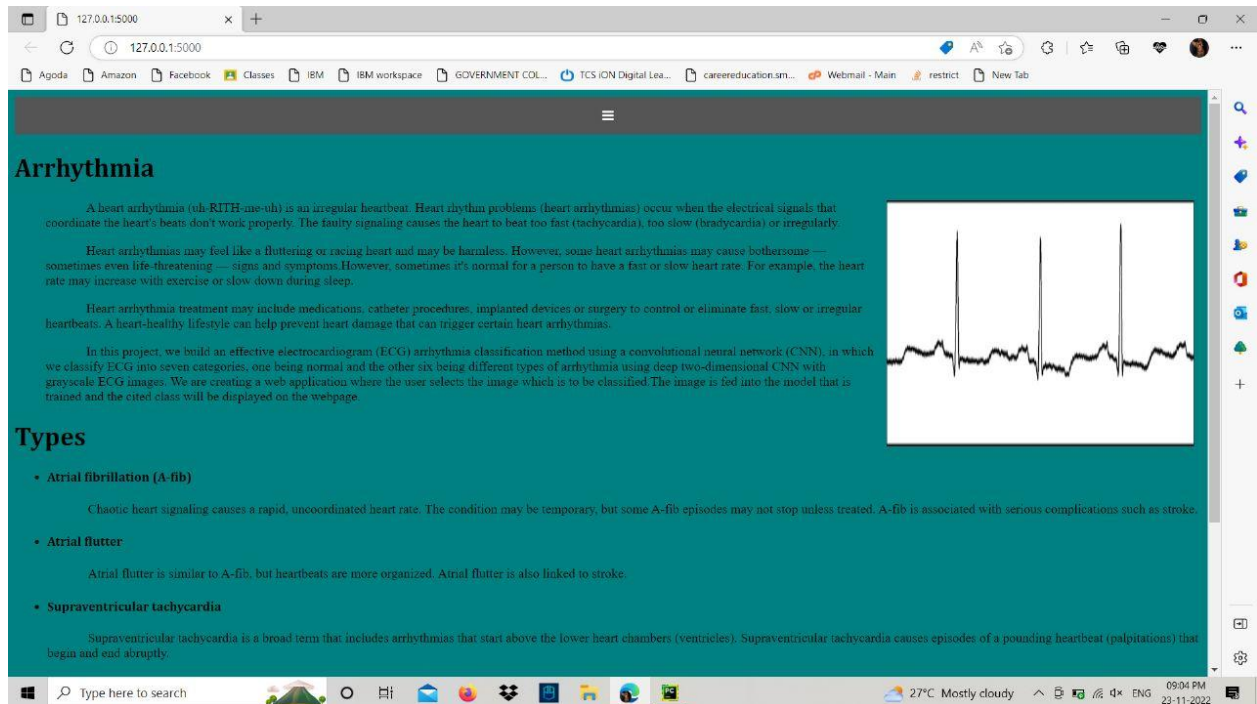
PROJECT DEVELOPMENT PHASE

SPRINT-4

LOCAL DEPLOYMENT:

```
C:\Windows\System32\cmd.exe - python app.py
Microsoft Windows [Version 10.0.22000.1898]
(c) Microsoft Corporation. All rights reserved.

D:\Classification of Arrhythmia by Using Deep Learning with 2-D ECG Spectral Image Representation>python app.py
2022-11-09 18:53:43.075379: W tensorflow/stream_executor/platform/default/dso_loader.cc:64] Could not load dynamic library 'cudart64_110.dll'; dlderror: cudart64_110.dll not found
check
D:\Classification of Arrhythmia by Using Deep Learning with 2-D ECG Spectral Image Representation>model\CAUDL.h5
2022-11-09 18:55:26.667248: W tensorflow/stream_executor/platform/default/dso_loader.cc:64] Could not load dynamic library 'nvcuda.dll'; dlderror: nvcuda.dll not found
2022-11-09 18:55:26.680214: W tensorflow/stream_executor/cuda/cuda_driver.cc:263] failed call to cuInit: UNKNOWN ERROR (383)
2022-11-09 18:55:26.704461: I tensorflow/stream_executor/cuda/cuda_diagnostics.cc:169] retrieving CUDA diagnostic information for host: DESKTOP-4VCEC3J
2022-11-09 18:55:26.704904: I tensorflow/stream_executor/cuda/cuda_diagnostics.cc:176] hostname: DESKTOP-4VCEC3J
2022-11-09 18:55:26.778397: I tensorflow/core/platform/cpu_feature_guard.cc:193] This TensorFlow binary is optimized with oneAPI Deep Neural Network Library (oneDNN) to use the following CPU instructions in performance-critical operations: AVX AVX2
To enable them in other operations, rebuild TensorFlow with the appropriate compiler flags.
* Serving Flask app "app" (lazy loading)
* Environment: production
  WARNING: This is a development server. Do not use it in a production deployment.
  Use a production WSGI server instead.
* Debug mode: off
* Running on http://127.0.0.1:5000/ (Press CTRL+C to quit)
```



127.0.0.1:5000

127.0.0.1:5000

AgodaAmazonFacebookClassesIBMIBM workspaceGOVERNMENT COL...TCS ION Digital Lea...careereducation.sm...Webmail - MainrestrictNew Tab

Home

symptoms

Lets Check

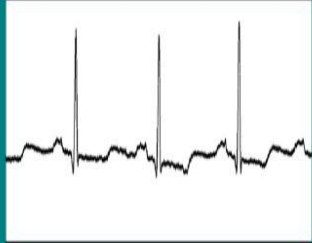
Arrhythmia

A heart arrhythmia (uh-RITH-me-uh) is an irregular heartbeat. Heart rhythm problems (heart arrhythmias) occur when the electrical signals that coordinate the heart's beats don't work properly. The faulty signaling causes the heart to beat too fast (tachycardia), too slow (bradycardia) or irregularly.

Heart arrhythmias may feel like a fluttering or racing heart and may be harmless. However, some heart arrhythmias may cause bothersome — sometimes even life-threatening — signs and symptoms. However, sometimes it's normal for a person to have a fast or slow heart rate. For example, the heart rate may increase with exercise or slow down during sleep.

Heart arrhythmia treatment may include medications, catheter procedures, implanted devices or surgery to control or eliminate fast, slow or irregular heartbeats. A heart-healthy lifestyle can help prevent heart damage that can trigger certain heart arrhythmias.

In this project, we build an effective electrocardiogram (ECG) arrhythmia classification method using a convolutional neural network (CNN), in which we classify ECG into seven categories, one being normal and the other six being different types of arrhythmia using deep two-dimensional CNN with grayscale ECG images. We are creating a web application where the user selects the image which is to be classified. The image is fed into the model that is trained and the cited class will be displayed on the webpage.



Types

- **Atrial fibrillation (A-fib)**

Chaotic heart signaling causes a rapid, uncoordinated heart rate. The condition may be temporary, but some A-fib episodes may not stop unless treated. A-fib is associated with serious complications such as stroke.
- **Atrial flutter**

127.0.0.1:5000/symptomsType here to search27°C Mostly cloudy09:04 PM23-11-2022


127.0.0.1:5000/symptoms

127.0.0.1:5000/symptoms

AgodaAmazonFacebookClassesIBMIBM workspaceGOVERNMENT COL...TCS ION Digital Lea...careereducation.sm...Webmail - MainrestrictNew Tab

Symptoms

- **In General, Arrhythmia symptoms are**
 - » Shortness of breath
 - » A fluttering in the chest
 - » A slow heartbeat (bradycardia)
 - » A racing heartbeat (tachycardia)
 - » Chest pain
- **May also include**
 - » Anxiety
 - » Fatigue
 - » Lightheadedness or dizziness
 - » Fainting (syncope) or near fainting
 - » Sweating



Type here to search27°C Mostly cloudy10:25 PM23-11-2022

