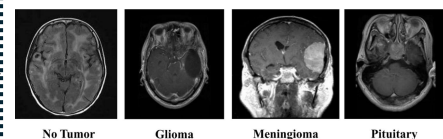


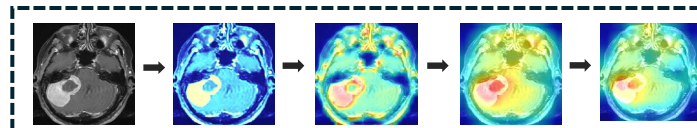
Prediction & Evaluation Metrics



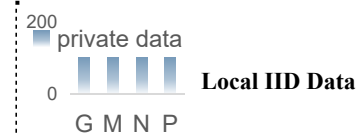
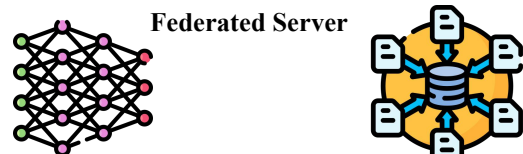
Accuracy
Precision
Recall
F-Score

Grad-CAM

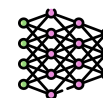
Visualization of Decision Pathways



Federated Server



Global Model



Aggregation



Pre-trained VGG19



Local Training



Weights Upload



Global Model Download



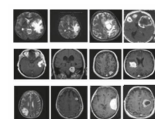
Uniformed Distribution

Testing

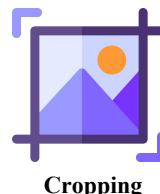
Training

Data Distribution to Clients

Data Collection and Preprocessing



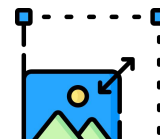
Brain Tumor MRI Dataset



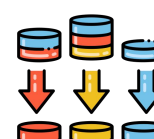
Cropping



Denoising and colormap



Resizing



Normalization