WORKING PRINCIPLE OF THE PROJECT:

Alzheimer's disease detection using VGG (Visual Geometry Group) neural networks involves several key steps:

1. Data Collection: Collect brain MRI or CT scans labeled as healthy or Alzheimer's disease-affected.

2. Preprocessing: Standardize image sizes, normalize pixel values, and augment the dataset to improve model robustness.

3. Model Architecture: Use VGG, a CNN with multiple convolutional and pooling layers for feature extraction.

4. Transfer Learning: Fine-tune a pre-trained VGG model on the specific Alzheimer's disease imaging dataset.

5. Training: Train the VGG model to differentiate between healthy and Alzheimer's-affected brain images.

6. Evaluation: Evaluate model performance using accuracy, precision, recall, and F1 score on validation data.

7. Deployment: Deploy the trained model to assist in clinical diagnosis of Alzheimer's disease from brain scans.