

# Distributed File System using FUSE

## PROJECT:

1. **PROJECT TITLE:** DISTRIBUTED FILE SYSTEM USING FUSE
2. **PROJECT DESCRIPTION:** Implementation of a DFS using a FUSE based backend, that provides replication, location transparency among other features
3. **TEAM MEMBERS:** Gautam Worah (gworah), Pardhakeswar Pacha (ppacha), Tapas Mallick (trmallic)

## DELIVERABLES:

1. A master slave architecture with data replication across clients to provide Availability, Reliability
2. Location transparency for data access across geographically distributed storage servers
3. Network transparency to provide data even if one node or connection fails

## DEPENDENCIES:

1. Python FUSE for implementing low level file operations
2. RPC Protocol for file transfer across servers and clients

## ISSUES:

1. Mounting remote filesystem using FUSE
2. Providing integrity of data across multiple clients
3. Maintaining a map of data v/s location where it is stored