

# Understanding Git with Alloy

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Git in a hurry

Project Goals

Progress so far



# Introducing Git

## Distributed Version Control System

- Records changes on files over time
- Recall old versions of files
- Each client has a mirror of the repository

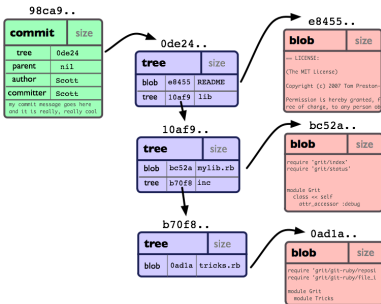
## Main differences with others VCS

- Snapshots, Not Differences

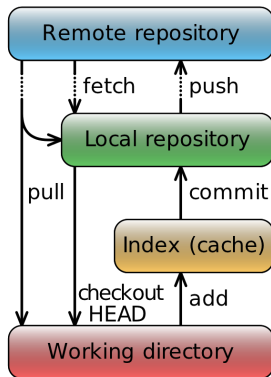


# The Git Object Model

- Each git object is named by a sha
- item2
- item



# Git workflow



# Project Goals

- Build a precise model of how Git works
- Analyze the model
- Check which properties the model (not) guarantee
- Compare to other systems
- Build a concise user manual based on the model



# What has been done so far

## First Approach

- Model Working Directory
- Model Index
- Model Object Model
  - Object hash are modeled

## Problem

*Model got too complex when adding operations*



# What has been done so far

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# What has been done so far

## Second Approach

- Focus on Object Model and Index
- Files are just a set of paths
- Object hash are the alloy atom's name



# What has been done so far

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