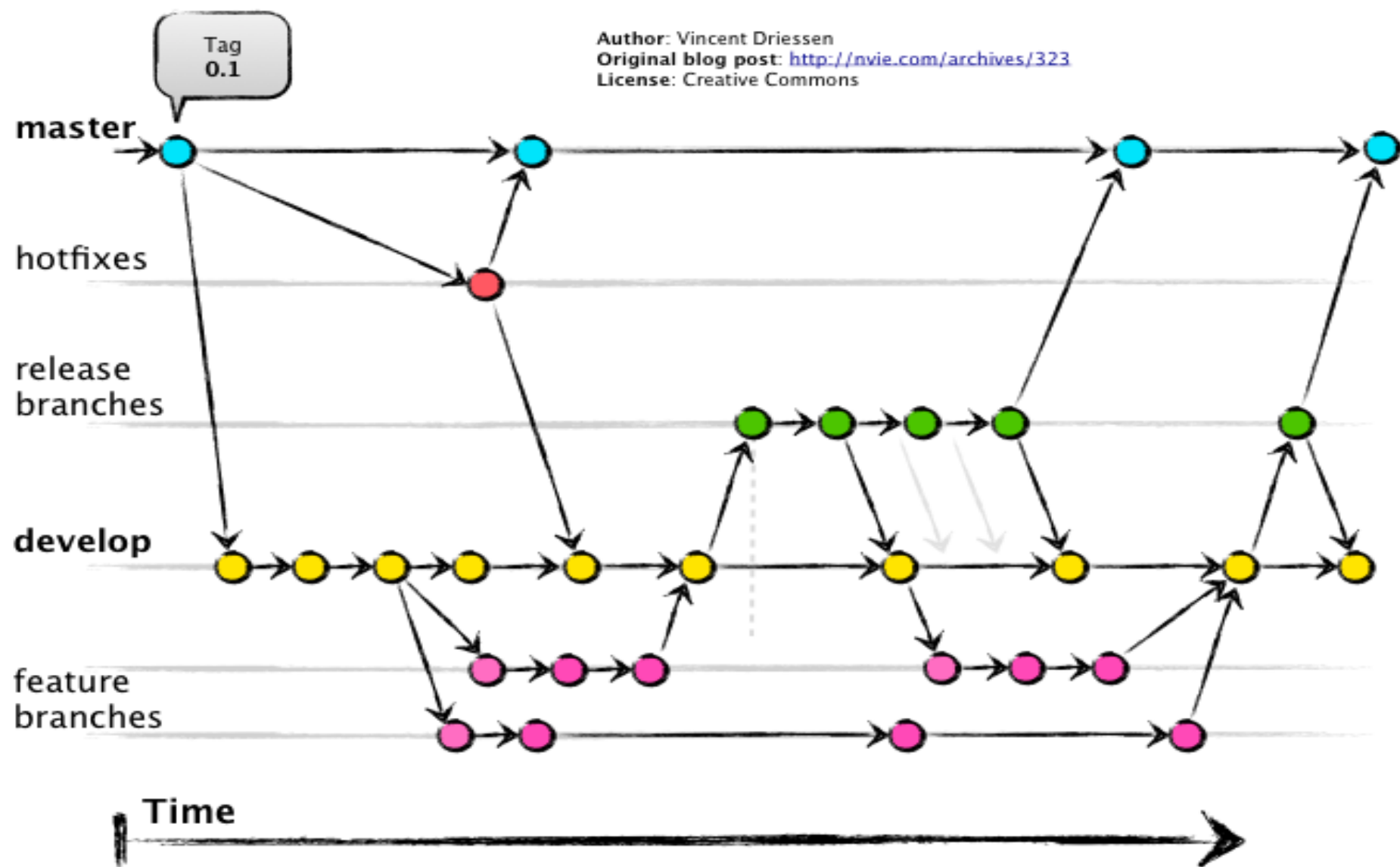


# Branching strategy

- A branching strategy is a strategy that software development teams adopt for writing, merging and deploying code with the help of a version control system like Git.
- Strategies like these are essential as they help in keeping project repositories organized, error free and avoid the dreaded merge conflicts when multiple developers simultaneously push and pull code from the same repository.
- There are four type of strategies-
  - a.) Github flow
  - b.) Gitlab flow
  - c.) Gitlow workflow
  - d.) Trunk Based Development

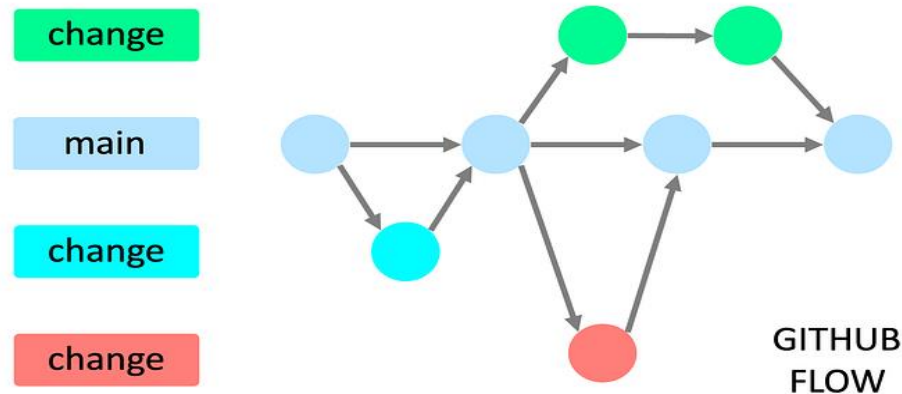
# Gitflow Workflow

- **Master** - Also known as main branch which is used to store the main code
- **Develop** - Used for ongoing development .Branch on which team is working it is a live long branch
- **Feature** - Branches which is created to create for new features.
- **Release** - Created from develop branch. Branches which has all the code which will be delivered to client if any bug got fix in hotfix it get merged into this.
- **Hotfix** - Hotfix branches created to solve bugs in release which solve all the issue and after fixing it , it get merge with release, feauture and main. hotfix branches are created from master branch .

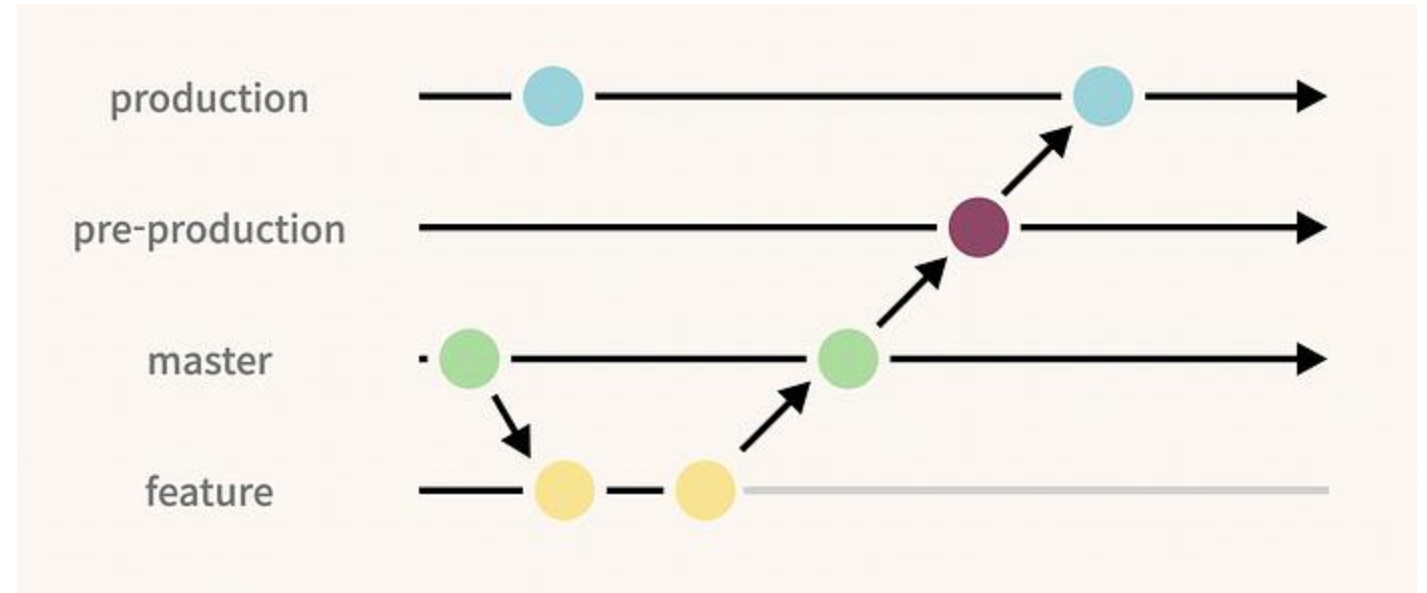


# Github flow

- Master- it will have all the code
- Feature – created from main to built specific feature then again merged into main after that it raise a PR and after testing it will deliver to customer.



# Gitlab Flow



- **Production:** Reflects the current state of production. Same as release branch
- **Environment:** Staging, testing, or other environment-specific branches are created from the production branch.
- **Main –** Store all the code
- **Feature:** Used for new developments, merged back into the main branch once completed.

# Trunk Based Development

- Trunk-Based Development emphasizes short-lived branches and frequent integration into the trunk (main branch). It uses agile methodology.
- **Trunk (Main Branch):** The primary branch where all changes are frequently integrated.
- **Short-Lived Feature Branches:** Created for small changes, merged back into the trunk as soon as possible.

