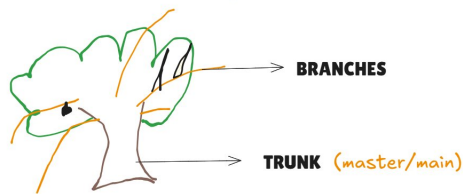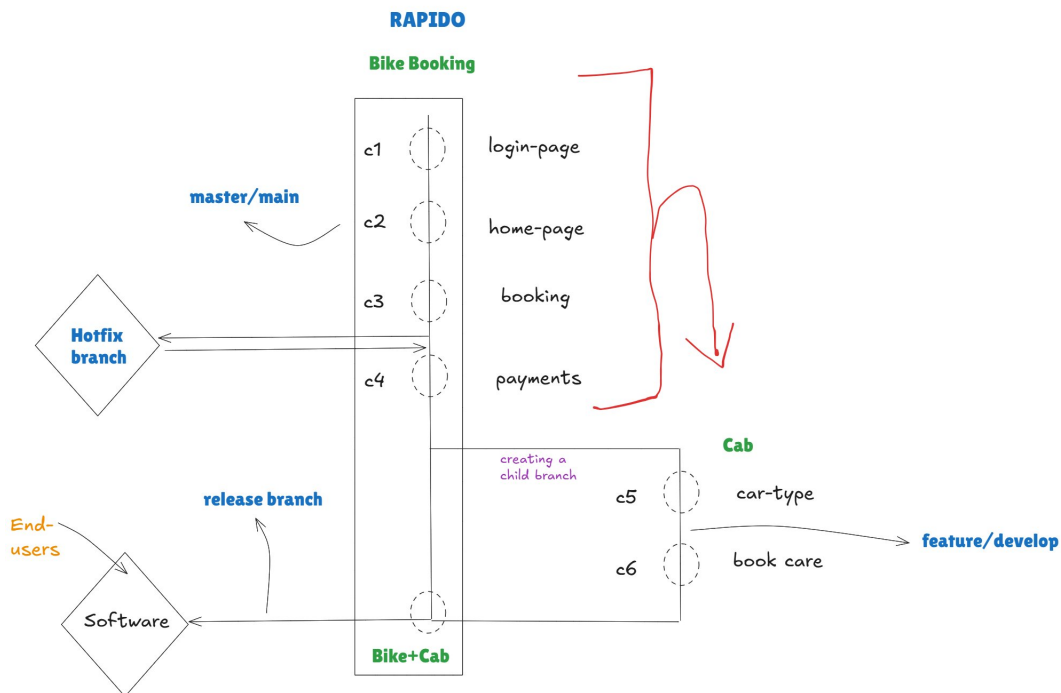# BRANCHING

BRANCHES

TRUNK (master/main)

Branch: A branch in GIT let's the developers work on new features, or bugs, or fixes &
experiment in an isolated environment, without effecting the main code of the
application.

Branching: It is a separate line of work.

RAPIDO

Bike Booking

c1 — login-page

master/main

c2 — home-page

c3 — booking

Hotfix branch

c4 — payments

creating a child branch

Cab

c5 — car-type

release branch

c6 — book care — feature/develop

End-users

Software

Bike+Cab

>> Branching is creating an extended part from the main branch & that extended part is called as a
'branch'.

>> Branching allows us to work in an isolated environment so that the main line of development is not
effected.

1. Master/main:
-- Default branch.
-- This branch has the stable production ready code.
-- This is the mainstream where the main source code of application is present.

2. Feature/develop:
-- Using this branch, new features are being developed & introduced in the application.
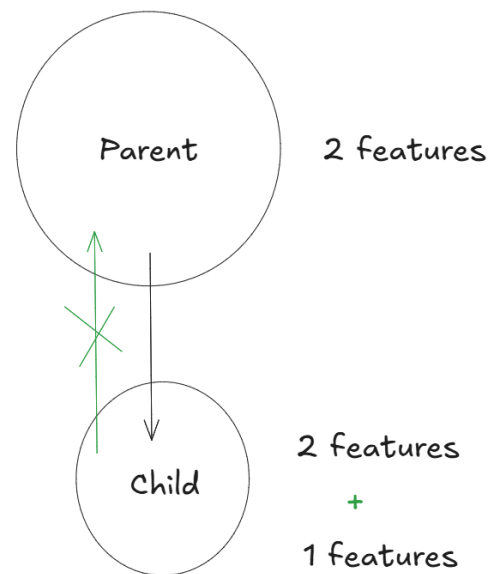
3. Release branch:
-- The branch used for preparing the software for release & introducing it to the
end-users.

4. Hotfix branch:
-- Issues that are needed to fix immediately are called as 'hot-fix'.
-- This branch is used for resolving/fixing the immediate issues in the application.

>> Anytime a child branch is created from a parent branch, whatever commits are present in the parent branch at that instance, will automatically be included in the child branch.

Parent   2 features

parent -> 3 commits

child   -> 3 commits

Child   2 features
                             +
                          1 features

COMMANDS

1. To list all the branch present locally (local repository):

   -> git branch   OR   git branch --list

2. To create a branch:

   -> git branch branch-name

3. To switch to a branch:

   -> git switch branch-name
   -> git checkout branch-name

4. To create & switch to the particular branch simultaenously:

   -> git checkout -b branch-name