Git Stamp - Flutter advanced versioning tool

Introduction

In the standard approach to software development, we release subsequent versions by increasing versions. It used to be version 1, 2, 3... Then someone came up with the idea of ​​making 2 parts of the version major.minor. An example here is the famous Windows 3.11. Currently, the most popular division is into three parts: major.minor.patch. <https://en.wikipedia.org/wiki/Software_versioning>

This is all with a single-branch approach. If we have software for multiple platforms and these platforms are divided into many more subplatforms, everything becomes more complicated. An example here is the game for PC, PlayStation, XBOX and Android + iOS. It should be possible to run a game from PS4 on PS5 for compatibility reasons, but usually the developers want this game to use new functions on the PS5 console, e.g. RayTracing or haptic functions in the new pad. In the example of Minecraft, we most likely have some common code and some Android, iOS, XBOX…

Using Minecraft as an example:

Version: v1.20.81

Build: 24130126

Branch: r/20\_u8

SHA: a9081c5429038dcf3f26269f7351d89f

The version number and build number are the default.

The branch and SHA are additionally.

Of course, we can generate it manually using a makefile.

build:

@echo 'export const VERSION = `$(GIT\_TAG)`' > version.js

Or we can also use a Git Stamp tool.

Usage

Just add the package to your flutter project and run the generator:

dart pub add git\_stamp

dart run git\_stamp

Example code:

import 'git\_stamp/git\_stamp.dart';

Text('Version: ${GitStamp.appVersion}'),

Text('Build: ${GitStamp.appBuild}'),

Text('Branch: ${GitStamp.buildBranch}'),

Text('SHA: ${GitStamp.latestCommit.hash}'),

In addition to simple information such as build date, the tool has a user interface that is compiled into the application with a list of commits and changes. More on the project website:

<https://pub.dev/packages/git_stamp>

Source: https://github.com/arononak/pagedout-institute/blob/main/ARTICLE\_GIT\_STAMP.md