PRs addressed in `flutter/flutter` between `b593f5167bce84fb3cad5c258477bf3abc1b14eb` and `d51fd86`

framework - 235 PRs

[#21896](#) Bottom sheet scrolling

[#28834](#) Sliver animated list

[#29188](#) Fix 25807: implement move in sliver multibox widget

[#29677](#) Fix calculation of hero rectTween when Navigator isn't fullscreen

[#29683](#) Show/hide toolbar and handles based on device kind

[#29809](#) Fix text selection toolbar appearing under obstructions

[#29824](#) Cupertino localization step 8: create a gen_cupertino_localizations and generate one for cupertino english and french

[#29954](#) Cupertino localization step 9: add tests

[#30040](#) Implement focus traversal for desktop platforms, shoehorn edition.

[#30076](#) Implements FocusTraversalPolicy and DefaultFocusTraversal features.

[#30129](#) Fix refresh control in the gallery demo, update comments

[#30224](#) Cupertino localization step 10: update the flutter_localizations README

[#30339](#) Add buttons to gestures

[#30388](#) Add hintStyle in SearchDelegate

[#30406](#) Add binaryMessenger constructor argument to platform channels

[#30572](#) [Material] Adaptive Slider constructor

[#30579](#) PointerDownEvent and PointerMoveEvent default `buttons` to 1

[#30612](#) Added required parameters to FlexibleSpaceBarSettings

[#30796](#) Unbounded TextField width error

[#30874](#) Redo "Remove pressure customization from some pointer events"

[#30884](#) [Material] Update TabController to support dynamic Tabs

[#30942](#) rectMoreOrLess equals, prep for 64bit rects

[#30979](#) fix issue 30526: rounding error

[#30983](#) Refactor core uses of FlutterError.

[#30988](#) Tight Paragraph Width

#31018 [Material] selected/unselected label styles + icon themes on BottomNavigationBar

#31025 added `scrimColor` property in Scaffold widget

#31093 Make the matchesGoldenFile docs link to an explanation of how to create golden image files

#31095 Add buttons customization to WidgetController and related testing classes

#31097 Fix text field selection toolbar under Opacity

#31227 Adding CupertinoTabController

#31228 Fix ExpansionPanelList Duplicate Global Keys Exception

#31275 Update SnackBar to allow for support of the new style from Material spec

#31291 Add some docs to StatefulBuilder

#31294 Improve Radio Documentation with Example

#31295 Improve ThemeData.accentColor connection to secondary color

#31316 Add InkWell docs on transitions and ink splash clipping

#31317 Add docs to AppBar

#31318 Add BottomSheetTheme to enable theming color, elevation, shape of BottomSheet

#31326 Add more shuffle cupertino icons

#31332 iOS selection handles are invisible

#31333 Clean up flutter_test/test/controller_test.dart

#31420 Add more breadcrumb docs to Transformation

#31421 Add Widget of the Week video to SizedBox

#31438 Implements focus handling and hover for Material buttons.

#31464 CupertinoPicker fidelity revision

#31485 Prevent exception being thrown on hasScrolledBody

#31493 Keycode generation doc fix

#31497 Revert "Fix 25807: implement move for sliver multibox widget (#29188)"

#31502 Improve Tabs documentation

#31514 Date picker layout exceptions

#31520 Don't add empty OpacityLayer to the engine

#31538 Fix typo in docs

#31566 TimePicker moves to minute mode after hour selection

#31568 fix transform assert

#31574 Improve RadioListTile Callback Behavior Consistency

#31581 Fix Exception on Nested TabBarView disposal

#31600 Re-enable const

#31619 Fix the documentation for UiKitView#creationParams

#31623 fix edge swiping and dropping back at starting point

#31634 Improve canvas example in sample dart ui app

#31644 Cupertino localization step 12: push translation for all supported languages

#31662 added shape property to SliverAppBar

#31681 [Material] Create a themable Range Slider (continuous and discrete)

#31687 Center iOS caret, remove constant offsets that do not scale

#31693 Adds a note to Radio's/RadioListTile's onChange

#31696 Attempt to reduce usage of runtimeType

#31699 Re-land: Add support for Tooltip hover

#31701 Add more asserts to check matrix validity

#31761 Support clipBehavior changes in hot reload

#31763 Fix ScrollbarPainter thumbExtent calculation and add padding

#31798 Fix tab indentation

#31802 Reland "Fix text field selection toolbar under Opacity (#31097)"

#31804 only build asset when there is asset declared in pubspec

#31819 Redo: Add buttons to gestures

#31822 remove unnecessary artificial delay in catalog example

#31824 fix FlutterDriver timeout

#31832 Allow DSS to be dragged when its children do not fill extent

#31851 Add documentation to Navigator

#31852 Text selection handles are sometimes not interactive

#31861 Add Horizontal Padding to Constrained Chip Label Calculations

#31890 apply fp hack to Flex

#31894 Introduce separate HitTestResults for Box and Sliver

#31902 Updated primaryColor docs to refer to colorScheme properties

#31903 Extract TODO comment from Image.asset dardoc

#31909 Change unfocus to unfocus the entire chain, not just the primary focus

#31929 Sample Code & Animation for Flow Widget

[#32654](link) Tabs code/doc cleanup

[#32686](link) enable lint prefer_null_aware_operators

[#32703](link) Add Doc Samples For CheckboxListTile, RadioListTile and SwitchListTile

[#32711](link) use null aware operators

[#32726](link) Material should not prevent ScrollNotifications from bubbling upwards

[#32730](link) Add reverseDuration to AnimationController

[#32776](link) Text field focus and hover support.

[#32823](link) Add enableInteractiveSelection to CupertinoTextField

[#32838](link) Handles hidden by keyboard

[#32842](link) Allow "from" hero state to survive hero animation in a push transition

[#32843](link) Added a missing dispose of an AnimationController that was leaking a ticker.

[#32853](link) Add onBytesReceived callback to consolidateHttpClientResponseBytes()

[#32857](link) Add debugNetworkImageHttpClientProvider

[#32904](link) Use reverseDuration on Tooltip and InkWell

[#32909](link) Documentation fix for debugProfileBuildsEnabled

[#32911](link) Material Long Press Text Handle Flash

[#32914](link) Make hover and focus not respond when buttons and fields are disabled.

[#32936](link) Add some sanity to the ImageStream listener API

[#32974](link) Fix disabled CupertinoTextField style

[#33058](link) Add more missing returns

[#33073](link) SliverAppBar shape property

[#33080](link) Fixed several issues with confirmDismiss handling on the LeaveBehindItem demo.

[#33090](link) [Material] Add support for hovered, pressed, and focused text color on Buttons.

[#33148](link) ExpandIcon Custom Colors

[#33152](link) ModalRoute resumes previous focus on didPopNext

[#33164](link) remove Layer.replaceWith due to no usage and no tests

[#33195](link) Slight clarification in the ImageCache docs

[#33226](link) Explain hairline rendering in BorderSide.width docs

[#33230](link) Framework support for font features in text styles

[#33260](link) Pass an async callback to testWidgets.

[#33279](link) Fix a problem in first focus determination.

[#33298](#) Add actions and keyboard shortcut map support

[#33361](#) (trivial) Rename test file

[#33369](#) Add loading support to Image

[#33370](#) Update FadeInImage to use new Image APIs

[#33406](#) Add web safe indirection to Platform.isPlatform getters

[#33431](#) Expose service client and app isolate in driver

[#33442](#) fix GridView documentation

[#33461](#) Various code cleanup improvements

[#33462](#) Fix text scaling of strut style

[#33467](#) fixed 33347 fill the gap during performLayout in SliverGrid and Slive...

[#33473](#) fix 23723 rounding error

[#33474](#) Fixed for DropdownButton crashing when a style was used that didn't include a fontSize

[#33475](#) Move declaration of semantic handlers from detectors to recognizers

[#33477](#) Fix onExit calling when the mouse is removed.

[#33488](#) use toFixedAsString and DoubleProperty in diagnosticProperties

[#33489](#) Remove empty file

[#33531](#) Fixed broken link in debugProfileBuildsEnabled documentation

[#33535](#) Custom height parameters for DataTable header and data rows

[#33620](#) Document that offsets are returned in logical pixels

[#33627](#) SliverFillRemaining flag for different use cases

[#33628](#) DataTable Custom Horizontal Padding

[#33632](#) Update the keycodes from source

[#33634](#) Let there be scroll bars

[#33653](#) Include advice about dispose in TextEditingController api

[#33662](#) Prep for engine roll

[#33663](#) Use conditional imports for flutter foundation libraries

[#33665](#) [Trivial] Move dropdownValue into State in DropdownButton sample docs

[#33674](#) Add documentation to ImplicitlyAnimatedWidgetState

[#33695](#) Add pseudo-key synonyms for keys like shift, meta, alt, and control.

[#33729](#) Update consolidateHttpClientResponseBytes() to use compressionState

[#33739](#) fixed cupertinoTextField placeholder textAlign

#33794 Text inline widgets, TextSpan rework

#33802 Double double tap toggles instead of error

#33805 Fixing duplicate golden test names

#33808 fix ExpansionPanelList merge the header semantics when it is not nece...

#33814 Added a benchmark for ImageCache

#33842 Don't print warning message when running benchmarks test.

#33865 Correct version name for BottomNavigationBar golden test

#33868 Game controller button support

#33876 Reland "Framework support for font features in text styles"

#33880 Splitting golden file versioning out as an argument of matchesGoldenFile

#33886 Add currentSystemFrameTimeStamp to SchedulerBinding

#33901 Respond to AndroidView focus events.

#33917 'the the' doc fix

#33946 Reland "Text inline widgets, TextSpan rework"

#33955 Add localFocalPoint to ScaleDetector

#33996 Remove unused/dead code from WidgetInspector

#33999 Updating MediaQuery with viewPadding

#34012 Extract DiagnosticsNode serializer from WidgetInspector

#34057 Add endIndent property to Divider and VerticalDivider

#34068 fix empty selection arrow when double clicked on empty read only text...

#34073 Dartdoc Generation README Improvements

#34112 Separate web and io implementations of network image

#34137 Added tool sample for PageController

#34175 Don't show scrollbar if there isn't enough content

#34243 update the Flutter.Frame event to use new engine APIs

#34285 fix Applying decoration for a table row widget will cause render exce...

#34298 Preserving SafeArea : Part 2

#34355 Text field vertical align

#34365 redux of a change to use new engine APIs for Flutter.Frame events

#34368 Fix semantics_tester

#34388 Change API doc link to api.dart.dev

[#34417](#) Include raw value in Diagnostics json for basic types

[#34424](#) SizedBox documentation minor update

[#34434](#) Semantics fixes

[#34440](#) Add Driver command to get diagnostics tree

[#34474](#) Release diagnostics

[#34501](#) [Material] Fix TextDirection and selected thumb for RangeSliderThumbShape and RangeSliderValueIndicatorShape

[#34508](#) add route information to Flutter.Navigation events

[#34512](#) Make sure fab semantics end up on top

[#34515](#) OutlineInputBorder adjusts for borderRadius that is too large

[#34519](#) fix page scroll position rounding error

[#34587](#) Do not copy paths, rects, and rrects when layer offset is zero

[#34597](#) [Material] Update slider gallery demo, including range slider

[#34664](#) Adjust defaults in docs to match new defaults in code.

[#34679](#) Fix-up code sample for TweenSequence

[#34683](#) add read only semantics flag

[#34684](#) Add more structure to errors.

[#34758](#) Added some Widgets of the Week Videos to documentation

[#34859](#) Fix Vertical Alignment Regression

[#34863](#) Prepare for HttpClientResponse Uint8List SDK change

[#34869](#) [Material] Properly call onChangeStart and onChangeEnd in Range Slider

[#34870](#) Add test case for Flutter Issue #27677 as a benchmark.

[#34919](#) Remove duplicate error parts

[#34932](#) Added onChanged property to TextFormField

[#35046](#) Add generated Icon diagram to api docs

tool - 140 PRs

[#28808](#) updated tearDownAll function

[#31028](#) Adds support for generating projects that use AndroidX support libraries

[#31039](#) Fix bundle id on iOS launch using flutter run

[#31282](#) Stop precaching the artifacts for dynamic mode.

[#31329](#) Add Xcode build script for macOS target

[#31342](#) check if project exists before regenerating platform specific tooling

[#31359](#) Remove support for building dynamic patches on Android

[#31399](#) add ignorable track-widget-creation flag to build aot

[#31400](#) add printError messages and tool exit to android device

[#31404](#) throw toolExit instead of rethrowing on filesystem exceptions

[#31406](#) if there is no .ios or ios sub-project, don't attempt building for iOS

[#31419](#) Add a note about events coming from the server

[#31446](#) Allow filtering devices to only those supported by current project

[#31491](#) Allow adb stdout to contain the port number without failing

[#31515](#) Support local engine and asset sync for macOS

[#31526](#) replace no-op log reader with real implementation

[#31591](#) make sure we exit early if the Runner.xcodeproj file is missing

[#31631](#) Teach Linux to use local engine

[#31736](#) update packages and unpin build

[#31757](#) Make FlutterProject factories synchronous

[#31759](#) Remove deprecated commands

[#31765](#) Initial sketch of tools testbed

[#31798](#) Fix tab indentation

[#31804](#) only build asset when there is asset declared in pubspec

[#31807](#) Make const available for classes that override AssetBundle

[#31812](#) Fix #31764: Show appropriate error message when fonts pubspec.yaml isn't iterable

[#31825](#) Fix missing return statements on function literals

[#31835](#) Cherry-pick ADB CrOS fix to beta

[#31850](#) Make Gradle error message more specific

[#31868](#) Handle notification errors

[#31873](#) Add basic desktop linux checks

[#31889](#) Start abstracting platform logic builds behind a shared interface

[#31895](#) Report CompileTime metric in flutter build aot --report-timings.

[#32060](#) make hotfix use a plus instead of minus

[#32071](#) [flutter_tool] In 'attach' use platform dill etc from the Fuchsia SDK

[#32072](#) don't NPE with empty pubspec

#32126 Bump multicast_dns version

#32335 Teach flutter msbuild for Windows

#32360 Allow flutter web to be compiled with flutter

#32404 Comment out .vscode/ in gitignore for templates

#32444 Updated some links

#32503 Add more missing returns

#32787 Support 32 and 64 bit

#32849 [flutter_tool] Adds support for 'run' for Fuchsia devices

#33041 Rename `flutter packages` to `flutter pub`

#33078 don't send crash reports if on a user branch

#33146 [flutter_tool] Don't look for Fuchsia artifacts on Windows

#33191 Remove colon from Gradle task name since it's deprecated

#33197 Wire up hot restart and incremental rebuilds for web

#33225 Reland "Clean up some flutter_tools tests and roll dependencies"

#33228 Make Paths absolute in settings.gradle

#33263 [flutter_tool] Improve Fuchsia 'run' tests

#33264 Add local overrides to testbed and provide more defaults

#33271 No longer necessary with ddc fix

#33272 Add mustRunAfter on mergeAssets task to force task ordering

#33277 Implement macOS support in `flutter doctor`

#33282 [flutter_tool] Use product runner in Fuchsia release build

#33283 Fix relative paths and snapshot logic in tool

#33284 make sure we build test targets too

#33297 Instrument add to app flows

#33374 Devfs cleanup and testing

#33443 Wrap Windows build invocation in a batch script

#33448 Use vswhere to find Visual Studio

#33450 Do not return null from IosProject.isSwift

#33454 ensure unpack declares required artifacts

#33458 Add to app measurement

#33466 [flutter_tool] Misc. fixes for Fuchsia

#33472 add daemon command to enumerate supported platforms

#33525 Add capability to flutter test --platform=chrome

#33526 Update Fuchsia SDK

#33533 Reland - Wire up hot restart and incremental rebuilds for web

#33540 Pass local engine variables to Windows build

#33608 Restructure macOS project files

#33611 Use Dart's new direct ELF generator to package AOT blobs as shared libraries in Android APKs

#33629 Add real-er restart for web using webkit inspection protocol

#33636 Implement plugin tooling support for macOS

#33676 Removing old golden checkout for integration test

#33684 Disable CocoaPods input and output paths in Xcode build phase and adopt new Xcode build system

#33696 Generate ELF shared libraries and allow multi-abi libs in APKs and App bundles

#33846 [flutter_tool] Fix 'q' for Fuchsia profile/debug mode

#33852 Disable CocoaPods input and output paths in Xcode build phase and adopt new Xcode build system

#33859 Reland support flutter test on platform chrome

#33867 Remove environment variable guards for command line desktop and web

#33872 Add 'doctor' support for Windows

#33874 Prevent windows web doctor from launching chrome

#33892 add benchmarks to track web size

#33923 [flutter_tool] Track APK sha calculation time

#33924 Added --dart-flags option to flutter run

#33951 Whitelist adb.exe heap corruption exit code.

#33956 Codegen an entrypoint for flutter web applications

#33980 Increase daemon protocol version for getSupportedPlatforms

#33990 Add device category for daemon

#34018 Add flutter create for the web

#34050 limit open files on macOS when copying assets

#34066 Adds the androidX flag to a modules pubspec.yaml template so it is se...

#34074 add analytics fields for attached device os version & run mode

#34081 Report async callback errors that currently go unreported.

#34084 make running on web spooky

[#34090](#) More verification on flutter build web, add tests and cleanup

[#34112](#) Separate web and io implementations of network image

[#34123](#) Generate ELF shared libraries and allow multi-abi libs in APKs and App bundles

[#34159](#) Use product define for flutter web and remove extra asset server

[#34162](#) Update the Fuchsia SDK

[#34181](#) Reland "Added --dart-flags option to flutter run (#33924)"

[#34189](#) Instrument usage of include_flutter.groovy and xcode_backend.sh

[#34255](#) [flutter_tool] Don't truncate verbose logs from _flutter.listViews

[#34276](#) [flutter_tool,fuchsia] Prefetch tiles when starting an app

[#34282](#) Split gradle_plugin_test.dart

[#34288](#) Report commands that resulted in success or failure

[#34291](#) Check whether FLUTTER_ROOT and FLUTTER_ROOT/bin are writable.

[#34293](#) Change Xcode developmentRegion to 'en' and CFBundleDevelopmentRegion to DEVELOPMENT_LANGUAGE

[#34295](#) Prepare for Uint8List SDK breaking changes

[#34353](#) Refactor Gradle plugin

[#34369](#) Remove unused flag `--target-platform` from `flutter run`

[#34376](#) Add missing pieces for 'driver' support on macOS

[#34447](#) [flutter_tool,fuchsia] Update the install flow for packaging migration.

[#34460](#) Add back ability to override the local engine in Gradle

[#34517](#) pass .packages path to snapshot invocation

[#34526](#) retry on HttpException during cache download

[#34527](#) Don't crash on invalid .packages file

[#34529](#) Remove compilation trace and dynamic support code

[#34573](#) Ensures flutter jar is added to all build types on plugin projects

[#34584](#) fix a typo

[#34589](#) Remove most of the target logic for build web, cleanup rules

[#34606](#) Remove portions of the Gradle script related to dynamic patching

[#34616](#) Kill compiler process when test does not exit cleanly

[#34624](#) Break down flutter doctor validations and results

[#34685](#) Close platform when tests are complete (dispose compiler and delete font files)

[#34686](#) unpin build daemon and roll dependencies

[#34725](#) Fix NPE in flutter tools

[#34736](#) Remove flags related to dynamic patching

[#34755](#) Add linux doctor implementation

[#34785](#) Tweak the display name of emulators

[#34794](#) Add `emulatorID` field to devices in daemon

[#34802](#) Prefer ephemeral devices from command line run

[#34856](#) set device name to Chrome

[#34885](#) Reland: rename web device

[#35074](#) Attempt to enable tool coverage redux

[#35084](#) Move findTargetDevices to DeviceManager

[#35092](#) Add FlutterProjectFactory so that it can be overridden internally.

f: material design - 76 PRs

[#21896](#) Bottom sheet scrolling

[#29188](#) Fix 25807: implement move in sliver multibox widget

[#29809](#) Fix text selection toolbar appearing under obstructions

[#30388](#) Add hintStyle in SearchDelegate

[#30572](#) [Material] Adaptive Slider constructor

[#30612](#) Added required parameters to FlexibleSpaceBarSettings

[#30796](#) Unbounded TextField width error

[#30884](#) [Material] Update TabController to support dynamic Tabs

[#30942](#) rectMoreOrLess equals, prep for 64bit rects

[#31018](#) [Material] selected/unselected label styles + icon themes on BottomNavigationBar

[#31025](#) added `scrimColor` property in Scaffold widget

[#31228](#) Fix ExpansionPanelList Duplicate Global Keys Exception

[#31275](#) Update SnackBar to allow for support of the new style from Material spec

[#31294](#) Improve Radio Documentation with Example

[#31295](#) Improve ThemeData.accentColor connection to secondary color

[#31316](#) Add InkWell docs on transitions and ink splash clipping

[#31317](#) Add docs to AppBar

[#31318](#) Add BottomSheetTheme to enable theming color, elevation, shape of BottomSheet

[#31438](#) Implements focus handling and hover for Material buttons.

[#31502](#) Improve Tabs documentation

[#31514](#) Date picker layout exceptions

[#31538](#) Fix typo in docs

[#31566](#) TimePicker moves to minute mode after hour selection

[#31574](#) Improve RadioListTile Callback Behavior Consistency

[#31581](#) Fix Exception on Nested TabBarView disposal

[#31644](#) Cupertino localization step 12: push translation for all supported languages

[#31662](#) added shape property to SliverAppBar

[#31681](#) [Material] Create a themable Range Slider (continuous and discrete)

[#31693](#) Adds a note to Radio's/RadioListTile's onChange

[#31699](#) Re-land: Add support for Tooltip hover

[#31763](#) Fix ScrollbarPainter thumbExtent calculation and add padding

[#31852](#) Text selection handles are sometimes not interactive

[#31861](#) Add Horizontal Padding to Constrained Chip Label Calculations

[#31902](#) Updated primaryColor docs to refer to colorScheme properties

[#31938](#) Update scrimDrawerColor with proper const format

[#32053](#) Increase TimePicker touch targets

[#32147](#) Added state management docs/sample to SwitchListTile

[#32177](#) Tab Animation Sample Video

[#32434](#) Support for replacing the TabController, after disposing the old one

[#32527](#) Added 'enabled' property to the PopupMenuButton

[#32528](#) Tapping a modal bottom sheet should not dismiss it by default

[#32530](#) Add Actions to AppBar Sample Doc

[#32620](#) Added ScrollController to TextField

[#32654](#) Tabs code/doc cleanup

[#32703](#) Add Doc Samples For CheckboxListTile, RadioListTile and SwitchListTile

[#32726](#) Material should not prevent ScrollNotifications from bubbling upwards

[#32776](#) Text field focus and hover support.

[#32838](#) Handles hidden by keyboard

[#32843](#) Added a missing dispose of an AnimationController that was leaking a ticker.

[#32904](#) Use reverseDuration on Tooltip and InkWell

[#32911](#) Material Long Press Text Handle Flash

[#32914](#) Make hover and focus not respond when buttons and fields are disabled.

[#32950](#) Material allows "select all" when not collapsed

[#33073](#) SliverAppBar shape property

[#33080](#) Fixed several issues with confirmDismiss handling on the LeaveBehindItem demo.

[#33090](#) [Material] Add support for hovered, pressed, and focused text color on Buttons.

[#33148](#) ExpandIcon Custom Colors

[#33361](#) (trivial) Rename test file

[#33474](#) Fixed for DropdownButton crashing when a style was used that didn't include a fontSize

[#33535](#) Custom height parameters for DataTable header and data rows

[#33628](#) DataTable Custom Horizontal Padding

[#33634](#) Let there be scroll bars

[#33653](#) Include advice about dispose in TextEditingController api

[#33665](#) [Trivial] Move dropdownValue into State in DropdownButton sample docs

[#33802](#) Double double tap toggles instead of error

[#33808](#) fix ExpansionPanelList merge the header semantics when it is not nece...

[#33865](#) Correct version name for BottomNavigationBar golden test

[#34055](#) Toggle toolbar exception fix

[#34057](#) Add endIndent property to Divider and VerticalDivider

[#34355](#) Text field vertical align

[#34501](#) [Material] Fix TextDirection and selected thumb for RangeSliderThumbShape and RangeSliderValueIndicatorShape

[#34515](#) OutlineInputBorder adjusts for borderRadius that is too large

[#34597](#) [Material] Update slider gallery demo, including range slider

[#34859](#) Fix Vertical Alignment Regression

[#34869](#) [Material] Properly call onChangeStart and onChangeEnd in Range Slider

[#34932](#) Added onChanged property to TextFormField

a: tests - 38 PRs

[#30942](#) rectMoreOrLess equals, prep for 64bit rects

[#31333](#) Clean up flutter_test/test/controller_test.dart

[#31452](#) Remove engine tests

#32070 rename foreground and background to light and dark

#32437 Add assert that the root widget has been attached.

#33349 Compatibility pass on flutter/foundation tests for JavaScript compilation. (1)

#33350 Compatibility pass on flutter/scheduler tests for JavaScript compilation. (2)

#33352 Compatibility pass on flutter/painting tests for JavaScript compilation. (3)

#33354 Compatibility pass on flutter/services tests for JavaScript compilation. (4)

#33355 Compatibility pass on flutter/rendering tests for JavaScript compilation. (5)

#33359 Compatibility pass on flutter/physics tests for JavaScript compilation. (6)

#33360 Compatibility pass on flutter/semantics tests for JavaScript compilation. (7)

#33361 (trivial) Rename test file

#33377 Compatibility pass on flutter/widgets tests for JavaScript compilation. (8)

#33378 Compatibility pass on flutter/material tests for JavaScript compilation. (9)

#33406 Add web safe indirection to Platform.isPlatform getters

#33459 make sure version check includes hotfixes

#33676 Removing old golden checkout for integration test

#33786 Add a real-er web restart, doctor, workflow

#33805 Fixing duplicate golden test names

#33842 Don't print warning message when running benchmarks test.

#33865 Correct version name for BottomNavigationBar golden test

#33880 Splitting golden file versioning out as an argument of matchesGoldenFile

#33932 More removing of timeouts.

#34012 Extract DiagnosticsNode serializer from WidgetInspector

#34017 Skip web test on crazy import

#34032 Enable web foundation tests

#34054 Make it easier to pass local engine flags when running devicelab tests

#34199 make sure this test doesn't run for real

#34368 Fix semantics_tester

#34417 Include raw value in Diagnostics json for basic types

#34440 Add Driver command to get diagnostics tree

#34616 Kill compiler process when test does not exit cleanly

#34685 Close platform when tests are complete (dispose compiler and delete font files)

#34863 Prepare for HttpClientResponse Uint8List SDK change

#34877 More shards

#35074 Attempt to enable tool coverage redux

#35130 pass new users for release_smoke_tests

waiting for tree to go green - 35 PRs

#28808 updated tearDownAll function

#28834 Sliver animated list

#29677 Fix calculation of hero rectTween when Navigator isn't fullscreen

#30979 fix issue 30526: rounding error

#31028 Adds support for generating projects that use AndroidX support libraries

#31452 Remove engine tests

#31600 Re-enable const

#31798 Fix tab indentation

#31832 Allow DSS to be dragged when its children do not fill extent

#31868 Handle notification errors

#32025 Make Hover Listener respect transforms

#32266 Add reference to Runner-Bridging-Header.h to iOS profile config

#32328 Add breadcrumbs to TextOverflow

#32380 const everything in Driver

#32410 Add ancestor and descendant finders to Driver

#33152 ModalRoute resumes previous focus on didPopNext

#33272 Add mustRunAfter on mergeAssets task to force task ordering

#33442 fix GridView documentation

#33461 Various code cleanup improvements

#33653 Include advice about dispose in TextEditingController api

#33865 Correct version name for BottomNavigationBar golden test

#33880 Splitting golden file versioning out as an argument of matchesGoldenFile

#33932 More removing of timeouts.

#33955 Add localFocalPoint to ScaleDetector

#34298 Preserving SafeArea : Part 2

#34440 Add Driver command to get diagnostics tree

[#34474](#) Release diagnostics

[#34573](#) Ensures flutter jar is added to all build types on plugin projects

[#34592](#) Config lib dependencies for flavors

[#34606](#) Remove portions of the Gradle script related to dynamic patching

[#34655](#) Revert "Config lib dependencies for flavors"

[#34685](#) Close platform when tests are complete (dispose compiler and delete font files)

[#34738](#) Update Xcode projects to recommended Xcode 10 project settings

[#34877](#) More shards

[#34919](#) Remove duplicate error parts

d: api docs - 34 PRs

[#31294](#) Improve Radio Documentation with Example

[#31295](#) Improve ThemeData.accentColor connection to secondary color

[#31316](#) Add InkWell docs on transitions and ink splash clipping

[#31317](#) Add docs to AppBar

[#31493](#) Keycode generation doc fix

[#31502](#) Improve Tabs documentation

[#31634](#) Improve canvas example in sample dart ui app

[#31693](#) Adds a note to Radio's/RadioListTile's onChange

[#31763](#) Fix ScrollbarPainter thumbExtent calculation and add padding

[#31902](#) Updated primaryColor docs to refer to colorScheme properties

[#31903](#) Extract TODO comment from Image.asset dardoc

[#31929](#) Sample Code & Animation for Flow Widget

[#32147](#) Added state management docs/sample to SwitchListTile

[#32177](#) Tab Animation Sample Video

[#32530](#) Add Actions to AppBar Sample Doc

[#32638](#) Fix apidocs in _WidgetsAppState.basicLocaleListResolution

[#32641](#) Updating dart.dev related links

[#32703](#) Add Doc Samples For CheckboxListTile, RadioListTile and SwitchListTile

[#32909](#) Documentation fix for debugProfileBuildsEnabled

[#33226](#) Explain hairline rendering in BorderSide.width docs

[#33442](#) fix GridView documentation

[#33620](#) Document that offsets are returned in logical pixels

[#33653](#) Include advice about dispose in TextEditingController api

[#33665](#) [Trivial] Move dropdownValue into State in DropdownButton sample docs

[#33917](#) 'the the' doc fix

[#34073](#) Dartdoc Generation README Improvements

[#34137](#) Added tool sample for PageController

[#34163](#) update CupertinoDialogAction docs

[#34356](#) Add widget of the week videos

[#34388](#) Change API doc link to api.dart.dev

[#34424](#) SizedBox documentation minor update

[#34679](#) Fix-up code sample for TweenSequence

[#34758](#) Added some Widgets of the Week Videos to documentation

[#35046](#) Add generated Icon diagram to api docs

team - 28 PRs

[#28808](#) updated tearDownAll function

[#30327](#) Add "feature request" issue template

[#31452](#) Remove engine tests

[#31825](#) Fix missing return statements on function literals

[#31885](#) Fix commit message UTF issue for deploy_gallery shard too

[#31944](#) Performance issue template

[#32345](#) Add master channel to performance issue template

[#32503](#) Add more missing returns

[#33267](#) Add unpublish_package script.

[#33459](#) make sure version check includes hotfixes

[#33539](#) Fix/update several HTML links

[#33554](#) Remove obsolete TODOs

[#33677](#) Roll pub dependencies

[#33786](#) Add a real-er web restart, doctor, workflow

[#33787](#) Add chrome stable to dockerfile and web shard

[#33861](#) Unmark flutter_gallery__back_button_memory as flaky

[#33932](#) More removing of timeouts.

[#34032](#) Enable web foundation tests

[#34054](#) Make it easier to pass local engine flags when running devicelab tests

[#34112](#) Separate web and io implementations of network image

[#34199](#) make sure this test doesn't run for real

[#34738](#) Update Xcode projects to recommended Xcode 10 project settings

[#34739](#) Disable widgets and material web tests

[#34812](#) Shard framework tests

[#34818](#) Make docs do less work/be less flaky

[#34857](#) More shards

[#34877](#) More shards

[#35130](#) pass new users for release_smoke_tests

f: cupertino - 27 PRs

[#29809](#) Fix text selection toolbar appearing under obstructions

[#29824](#) Cupertino localization step 8: create a gen_cupertino_localizations and generate one for cupertino english and french

[#29954](#) Cupertino localization step 9: add tests

[#30129](#) Fix refresh control in the gallery demo, update comments

[#30224](#) Cupertino localization step 10: update the flutter_localizations README

[#31227](#) Adding CupertinoTabController

[#31308](#) Added font bold when isDefaultAction is true in CupertinoDialogAction

[#31326](#) Add more shuffle cupertino icons

[#31464](#) CupertinoPicker fidelity revision

[#31623](#) fix edge swiping and dropping back at starting point

[#31644](#) Cupertino localization step 12: push translation for all supported languages

[#31763](#) Fix ScrollbarPainter thumbExtent calculation and add padding

[#31852](#) Text selection handles are sometimes not interactive

[#32013](#) Cupertino Turkish Translation

[#32086](#) Fix CupertinoSliverRefreshControl onRefresh callback

[#32469](#) Let CupertinoNavigationBarBackButton take a custom onPressed

[#32513](#) Cupertino localization step 12 try 2: push translation for all supported languages

[#32620](#) Added ScrollController to TextField

[#32823](#) Add enableInteractiveSelection to CupertinoTextField

[#32974](#) Fix disabled CupertinoTextField style

[#33624](#) CupertinoTabScaffold crash fix

[#33634](#) Let there be scroll bars

[#33653](#) Include advice about dispose in TextEditingController api

[#33739](#) fixed cupertinoTextField placeholder textAlign

[#34095](#) Cupertino text edit tooltip, reworked

[#34163](#) update CupertinoDialogAction docs

[#34964](#) CupertinoTextField.onTap

severe: API break - 17 PRs

[#29188](#) Fix 25807: implement move in sliver multibox widget

[#29683](#) Show/hide toolbar and handles based on device kind

[#30040](#) Implement focus traversal for desktop platforms, shoehorn edition.

[#30579](#) PointerDownEvent and PointerMoveEvent default `buttons` to 1

[#30874](#) Redo "Remove pressure customization from some pointer events"

[#31227](#) Adding CupertinoTabController

[#31574](#) Improve RadioListTile Callback Behavior Consistency

[#32059](#) fix issue 14014 read only text field

[#32842](#) Allow "from" hero state to survive hero animation in a push transition

[#33148](#) ExpandIcon Custom Colors

[#33164](#) remove Layer.replaceWith due to no usage and no tests

[#33370](#) Update FadeInImage to use new Image APIs

[#33794](#) Text inline widgets, TextSpan rework

[#33946](#) Reland "Text inline widgets, TextSpan rework"

[#34051](#) Reland "Text inline widgets, TextSpan rework (#30069)" with improved backwards compatibility

[#34095](#) Cupertino text edit tooltip, reworked

[#34501](#) [Material] Fix TextDirection and selected thumb for RangeSliderThumbShape and RangeSliderValueIndicatorShape

a: text input - 15 PRs

[#29683](#) Show/hide toolbar and handles based on device kind

[#31687](#) Center iOS caret, remove constant offsets that do not scale

[#32059](#) fix issue 14014 read only text field

[#32823](#) Add enableInteractiveSelection to CupertinoTextField

[#32838](#) Handles hidden by keyboard

[#32974](#) Fix disabled CupertinoTextField style

[#33794](#) Text inline widgets, TextSpan rework

[#33802](#) Double double tap toggles instead of error

[#33946](#) Reland "Text inline widgets, TextSpan rework"

[#34051](#) Reland "Text inline widgets, TextSpan rework (#30069)" with improved backwards compatibility

[#34055](#) Toggle toolbar exception fix

[#34068](#) fix empty selection arrow when double clicked on empty read only text...

[#34095](#) Cupertino text edit tooltip, reworked

[#34515](#) OutlineInputBorder adjusts for borderRadius that is too large

[#34859](#) Fix Vertical Alignment Regression

❈ platform-web - 15 PRs

[#33197](#) Wire up hot restart and incremental rebuilds for web

[#33349](#) Compatibility pass on flutter/foundation tests for JavaScript compilation. (1)

[#33350](#) Compatibility pass on flutter/scheduler tests for JavaScript compilation. (2)

[#33352](#) Compatibility pass on flutter/painting tests for JavaScript compilation. (3)

[#33354](#) Compatibility pass on flutter/services tests for JavaScript compilation. (4)

[#33355](#) Compatibility pass on flutter/rendering tests for JavaScript compilation. (5)

[#33359](#) Compatibility pass on flutter/physics tests for JavaScript compilation. (6)

[#33360](#) Compatibility pass on flutter/semantics tests for JavaScript compilation. (7)

[#33377](#) Compatibility pass on flutter/widgets tests for JavaScript compilation. (8)

[#33378](#) Compatibility pass on flutter/material tests for JavaScript compilation. (9)

[#33629](#) Add real-er restart for web using webkit inspection protocol

[#33956](#) Codegen an entrypoint for flutter web applications

[#34018](#) Add flutter create for the web

[#34112](#) Separate web and io implementations of network image

[#34159](#) Use product define for flutter web and remove extra asset server

a: desktop - 14 PRs

[#29683](#) Show/hide toolbar and handles based on device kind

[#30040](#) Implement focus traversal for desktop platforms, shoehorn edition.

[#30076](#) Implements FocusTraversalPolicy and DefaultFocusTraversal features.

[#30339](#) Add buttons to gestures

[#30579](#) PointerDownEvent and PointerMoveEvent default `buttons` to 1

[#31493](#) Keycode generation doc fix

[#31819](#) Redo: Add buttons to gestures

[#31935](#) Redo#2: Add buttons to gestures

[#33298](#) Add actions and keyboard shortcut map support

[#33443](#) Wrap Windows build invocation in a batch script

[#33454](#) ensure unpack declares required artifacts

[#33636](#) Implement plugin tooling support for macOS

[#33695](#) Add pseudo-key synonyms for keys like shift, meta, alt, and control.

[#33868](#) Game controller button support

t: gradle - 11 PRs

[#32787](#) Support 32 and 64 bit

[#33191](#) Remove colon from Gradle task name since it's deprecated

[#33228](#) Make Paths absolute in settings.gradle

[#33272](#) Add mustRunAfter on mergeAssets task to force task ordering

[#33696](#) Generate ELF shared libraries and allow multi-abi libs in APKs and App bundles

[#34123](#) Generate ELF shared libraries and allow multi-abi libs in APKs and App bundles

[#34353](#) Refactor Gradle plugin

[#34460](#) Add back ability to override the local engine in Gradle

[#34573](#) Ensures flutter jar is added to all build types on plugin projects

[#34592](#) Config lib dependencies for flavors

[#34668](#) Re-land config lib dependencies for flavors

f: scrolling - 9 PRs

[#31485](#) Prevent exception being thrown on hasScrolledBody

[#31763](#) Fix ScrollbarPainter thumbExtent calculation and add padding

[#31832](#) Allow DSS to be dragged when its children do not fill extent

#32620 Added ScrollController to TextField

#32726 Material should not prevent ScrollNotifications from bubbling upwards

#32842 Allow "from" hero state to survive hero animation in a push transition

#33627 SliverFillRemaining flag for different use cases

#33634 Let there be scroll bars

#34175 Don't show scrollbar if there isn't enough content

engine - 6 PRs

#31520 Don't add empty OpacityLayer to the engine

#33272 Add mustRunAfter on mergeAssets task to force task ordering

#33662 Prep for engine roll

#34276 [flutter_tool,fuchsia] Prefetch tiles when starting an app

#34460 Add back ability to override the local engine in Gradle

#34870 Add test case for Flutter Issue #27677 as a benchmark.

severe: new feature - 6 PRs

#33148 ExpandIcon Custom Colors

#33535 Custom height parameters for DataTable header and data rows

#33628 DataTable Custom Horizontal Padding

#33794 Text inline widgets, TextSpan rework

#33946 Reland "Text inline widgets, TextSpan rework"

#34051 Reland "Text inline widgets, TextSpan rework (#30069)" with improved backwards compatibility

t: flutter driver - 5 PRs

#28808 updated tearDownAll function

#31824 fix FlutterDriver timeout

#32380 const everything in Driver

#33431 Expose service client and app isolate in driver

#33786 Add a real-er web restart, doctor, workflow

a: images - 5 PRs

#32853 Add onBytesReceived callback to consolidateHttpClientResponseBytes()

#32857 Add debugNetworkImageHttpClientProvider

[#32936](x) Add some sanity to the ImageStream listener API

[#33729](x) Update consolidateHttpClientResponseBytes() to use compressionState

[#33814](x) Added a benchmark for ImageCache

a: animation - 4 PRs

[#21896](x) Bottom sheet scrolling

[#29677](x) Fix calculation of hero rectTween when Navigator isn't fullscreen

[#32730](x) Add reverseDuration to AnimationController

[#32842](x) Allow "from" hero state to survive hero animation in a push transition

▣ platform-android - 4 PRs

[#31491](x) Allow adb stdout to contain the port number without failing

[#32950](x) Material allows "select all" when not collapsed

[#33191](x) Remove colon from Gradle task name since it's deprecated

[#33696](x) Generate ELF shared libraries and allow multi-abi libs in APKs and App bundles

d: examples - 4 PRs

[#31634](x) Improve canvas example in sample dart ui app

[#31822](x) remove unnecessary artificial delay in catalog example

[#31929](x) Sample Code & Animation for Flow Widget

[#35046](x) Add generated Icon diagram to api docs

a: typography - 4 PRs

[#31987](x) Text wrap width

[#33794](x) Text inline widgets, TextSpan rework

[#33946](x) Reland "Text inline widgets, TextSpan rework"

[#34051](x) Reland "Text inline widgets, TextSpan rework (#30069)" with improved backwards compatibility

t: xcode - 4 PRs

[#32266](x) Add reference to Runner-Bridging-Header.h to iOS profile config

[#33684](x) Disable CocoaPods input and output paths in Xcode build phase and adopt new Xcode build system

[#34293](x) Change Xcode developmentRegion to 'en' and CFBundleDevelopmentRegion to DEVELOPMENT_LANGUAGE

[#34738](x) Update Xcode projects to recommended Xcode 10 project settings

severe: crash - 3 PRs

#31228 Fix ExpansionPanelList Duplicate Global Keys Exception

#31581 Fix Exception on Nested TabBarView disposal

#34460 Add back ability to override the local engine in Gradle

◇ platform-ios - 3 PRs

#31332 iOS selection handles are invisible

#31687 Center iOS caret, remove constant offsets that do not scale

#33684 Disable CocoaPods input and output paths in Xcode build phase and adopt new Xcode build system

a: internationalization - 3 PRs

#31644 Cupertino localization step 12: push translation for all supported languages

#32013 Cupertino Turkish Translation

#32513 Cupertino localization step 12 try 2: push translation for all supported languages

○ platform-fuchsia - 3 PRs

#32849 [flutter_tool] Adds support for 'run' for Fuchsia devices

#34162 Update the Fuchsia SDK

#34276 [flutter_tool,fuchsia] Prefetch tiles when starting an app

a: existing-apps - 3 PRs

#33297 Instrument add to app flows

#33450 Do not return null from IosProject.isSwift

#34189 Instrument usage of include_flutter.groovy and xcode_backend.sh

a: accessibility - 3 PRs

#33808 fix ExpansionPanelList merge the header semantics when it is not nece...

#34368 Fix semantics_tester

#34434 Semantics fixes

customer: solaris - 2 PRs

#29677 Fix calculation of hero rectTween when Navigator isn't fullscreen

#34298 Preserving SafeArea : Part 2

e: desktop - 2 PRs

#31329 Add Xcode build script for macOS target

#31567 Remove need for build/name scripts on Linux desktop

⌘ platform-mac - 2 PRs

#31329 Add Xcode build script for macOS target

#33636 Implement plugin tooling support for macOS

a: fidelity - 2 PRs

#31464 CupertinoPicker fidelity revision

#33634 Let there be scroll bars

f: date/time picker - 2 PRs

#31464 CupertinoPicker fidelity revision

#32843 Added a missing dispose of an AnimationController that was leaking a ticker.

team: gallery - 2 PRs

#31486 fix precedence issue

#33634 Let there be scroll bars

dependency: dart - 2 PRs

#32787 Support 32 and 64 bit

#34295 Prepare for Uint8List SDK breaking changes

team: flakes - 2 PRs

#33932 More removing of timeouts.

#34199 make sure this test doesn't run for real

customer: espresso - 2 PRs

#34012 Extract DiagnosticsNode serializer from WidgetInspector

#34440 Add Driver command to get diagnostics tree

severe: customer critical - 2 PRs

#34298 Preserving SafeArea : Part 2

#34519 fix page scroll position rounding error

t: flutter doctor - 2 PRs

[#34624](#) Break down flutter doctor validations and results

[#34755](#) Add linux doctor implementation

f: routes - 1 PRs

[#21896](#) Bottom sheet scrolling

p: framework - 1 PRs

[#30406](#) Add binaryMessenger constructor argument to platform channels

❖ platform-windows - 1 PRs

[#33443](#) Wrap Windows build invocation in a batch script

a: size - 1 PRs

[#34474](#) Release diagnostics

customer: google - 1 PRs

[#34474](#) Release diagnostics

severe: performance - 1 PRs

[#34870](#) Add test case for Flutter Issue #27677 as a benchmark.

This release included 841 PRs. Not all may be shown; some PRs such as those generated by autorollers are omitted.

PRs addressed in `flutter/engine` between `b593f5167bce84fb3cad5c258477bf3abc1b14eb` and `d004bcd4d619fc3574761d63d7cf7b7291332c79`

affects: text input - 2 PRs

[#9322](#) Check for invalid indexes when performing InputAdpator backspace.

[#9406](#) Update harfbuzz to 2.5.2

platform-android - 1 PRs

[#9172](#) Use shared library when libapp.so is found

affects: dev experience - 1 PRs

[#9304](#) Decorate UIApplicationDelegate wrappers with matching UIKit deprecation

platform-ios - 1 PRs

[#9304](#) Decorate UIApplicationDelegate wrappers with matching UIKit deprecation

accessibility - 1 PRs

[#9321](#) Fix a11y in embedded Android views post O

crash - 1 PRs

[#9322](#) Check for invalid indexes when performing InputAdpator backspace.

affects: framework - 1 PRs

[#9452](#) Convert RRect.scaleRadii to public method

affects: tests - 1 PRs

[#9458](#) Test cleanup geometry_test.dart

This release included 605 PRs. Not all may be shown; some PRs such as those generated by autorollers are omitted.