**# Task: Chromium Extension APIs**

The task is to implement a new extension api namepace: `chrome.utilities`.

**It should contain the following features:**

- `chrome.utilities.getVersion()`: A function which returns the current version of Chromium as a string.

- `chrome.utilities.isFirstRun()`: A function which returns a boolean indicating whether the current run is the first run of the browser.

- `chrome.utilities.onClipboardContentChanged`: An event which fires when the content of the clipboard changes.

You may submit your implementation as git patch files and/or a copy of the source file(s) with your changes directly applied. Please include only files relevant to the solution, and name them to indicate the path within the Chromium source tree eg. `{chromium-path}-{file\_name}[.patch]`.

**Here are some examples:**

```

chrome-browser-extensions-api-tabs-tabs\_api.cc

chrome-common-extensions-api-tabs.json

chrome-common-extensions-api-\_permission\_features.json

chrome-common-extensions-api-\_api\_features.json

```

**We recognize that building Chromium can be challenging. If you are unable to compile it, please submit your proposed changes regardless. We are not evaluating your ability to compile successfully, but rather your ability to understand and work within the codebase.**

## Acceptance Criteria

- `chrome.utilities` namespace is available to all extensions which request the "utilities" permission in their manifest.

- `chrome.utilities.getVersion()` function returns the current version of Chromium as a string.

- `chrome.utilities.isFirstRun()` function returns a boolean indicating whether the current run is the first run of the browser.

- A handler can be registered to the `chrome.utilities.onClipboardContentChanged` event, and the handler is invoked when the content of the clipboard changes.

Please provide a README with a brief explanation of your approach, your platform/arch, and which version of Chromium you used.

## Resources

**Some resources which may be of assistance:**

- https://source.chromium.org/chromium

- https://chromium.googlesource.com/chromium/src/+/HEAD/chrome/common/extensions/api/\_features.md

- https://developer.chrome.com/docs/extensions/reference/api

- https://chromium.googlesource.com/chromium/src/+/main/extensions/docs/writing\_a\_new\_api.md