YoutubeVideoBookmark Documentation

# Overview

YoutubeBookmark is a lightweight Chrome extension designed to help you save and manage key moments in YouTube videos. Whether it's an important scene, tutorial step, or a favorite moment, this extension lets you bookmark timestamps with ease.

# Key Features

* One-Click Bookmarking: Save any video moment instantly.
* Easy Bookmark Management: View or delete bookmarks in a dedicated popup.
* YouTube Integration: Appears directly in the video player.
* Cross-Device Sync: Uses chrome.storage.sync for automatic backup and access across devices.

# Installation Guide

Manual Setup

1. Clone the Repository:

git clone https://github.com/Kun-Alexandru/ytb-bookmark.git

2. Open Chrome Extensions Settings:

- Go to chrome://extensions/

3. Enable Developer Mode:

- Toggle it on in the top-right corner.

4. Load the Unpacked Extension:

- Click Load unpacked and select the project folder.

# How to Use

1. Open any video on YouTube.

2. A bookmark button will appear on the video interface.

3. Click it to save the current timestamp.

4. Open the extension popup to view, jump to, or delete bookmarks.

# Project Structure

YoutubeBookmark/  
├── manifest.json # Chrome extension metadata  
├── background.js # Handles messaging and storage  
├── contentScript.js # Injected script on YouTube pages  
├── popup.html # Popup UI layout  
├── popup.js # Logic for popup behavior  
├── popup.css # Styling for popup  
├── utils.js # Time formatting and video ID tools  
└── assets/ # Icons and images

# Architecture & Data Flow

contentScript.js

- Injected into YouTube pages

- Adds a bookmark button to the video player

- Extracts video ID and current time

- Sends data to storage via messaging

popup.js

- Reads current video bookmarks

- Displays and manages saved entries

background.js

- Handles communication between the popup and content script

- Interfaces with chrome.storage.sync

# Manifest Configuration

{  
 "manifest\_version": 3,  
 "name": "YoutubeBookmark",  
 "version": "1.0",  
 "permissions": ["storage", "scripting", "activeTab"],  
 "background": {  
 "service\_worker": "background.js"  
 },  
 "content\_scripts": [  
 {  
 "matches": ["\*://www.youtube.com/\*"],  
 "js": ["contentScript.js"]  
 }  
 ],  
 "action": {  
 "default\_popup": "popup.html"  
 }  
}

# Bookmark Storage Format

{  
 "ID": [  
 {  
 "time": 300,  
 "desc": "something descriptive"  
 }  
 ]  
}

# Technologies Used

- JavaScript, HTML and CSS

- Chrome Extensions API – Manifest V3

- chrome.storage.sync to save and sync the data