

# THE USE OF SUB-FORUMS IN SOFTWARE PRODUCT FORUMS



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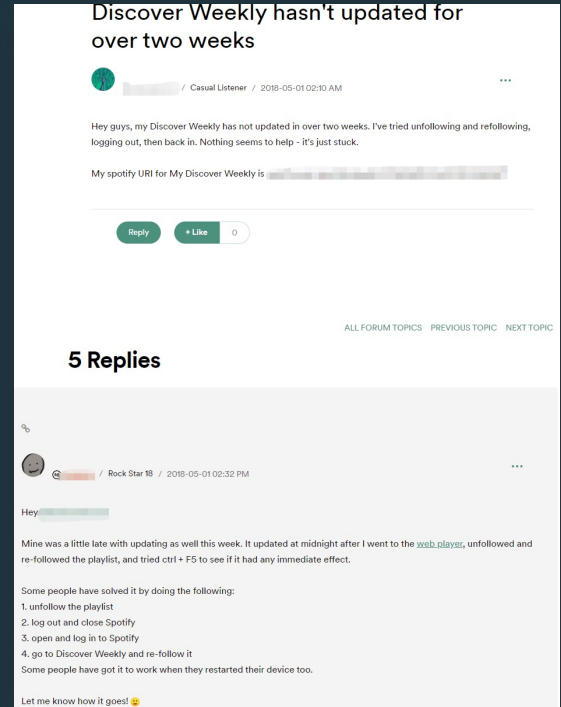
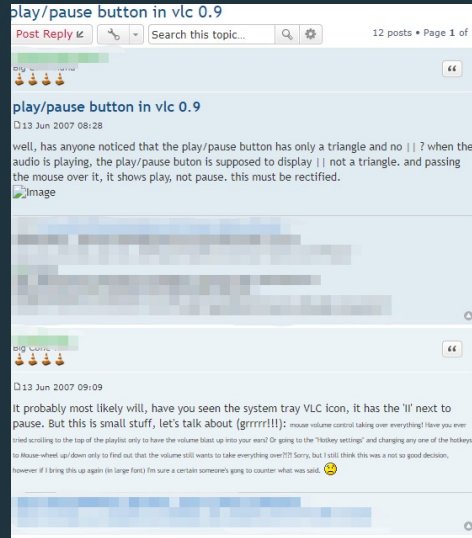
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# SOFTWARE PRODUCT FORUMS

- One of the more popular platforms for software-based user feedback
- Designed by developers
- More focused on discussion on specific software



# SUB-FORUMS

- Post Filtering
- Similar to high level classification labels found in other works
- Categories varies based on forums
- User chooses where to submit

## Help categories

Basic view Detailed view

Ongoing Issues	102032 POSTS	8 days ago
<b>Account &amp; Payment</b>		
Accounts	325607 POSTS	1 min ago
Subscriptions	64026 POSTS	2 years ago
Premium Family	28237 POSTS	3 days ago
Premium Student	11670 POSTS	15 mins ago

VLC MEDIA PLAYER	TOPICS	POSTS	LAST POST
 <b>VLC media player for Windows Troubleshooting</b> Microsoft Windows <b>specific</b> usage questions	42519	176843	<b>No record button showing to r...</b> by Anamandy <a href="#">↗</a> 14 Sep 2021 22:22
 <b>VLC media player for Linux and friends Troubleshooting</b> *nix <b>specific</b> usage questions	10623	37398	<b>Re: how to capture log messag...</b> by Shaon8630 <a href="#">↗</a> 15 Sep 2021 07:38
 <b>VLC media player for macOS Troubleshooting</b> macOS <b>specific</b> usage questions	10142	38008	<b>Re: Hardcoding Subtitles Issue</b> by tarchuletta <a href="#">↗</a> 08 Sep 2021 23:04
 <b>VLC for iOS, iPadOS and Apple TV</b> iOS, iPad, iPhone, tvOS <b>specific</b> usage questions	2208	8804	<b>Re: Unable to upload movies o...</b> by bubu7 <a href="#">↗</a> 10 Sep 2021 14:38
 <b>VLC for Android and Chrome OS</b> VLC for Android and Chrome OS <b>specific</b> usage questions	3979	15341	<b>Re: Anyone using Airtum foot...</b> by Aza <a href="#">↗</a> 13 Sep 2021 06:26
 <b>VLC for Windows Store</b> VLC for Windows Store <b>specific</b> questions <small>This includes WinRT, Windows RT, Windows Phone, Windows Mobile and Xbox 1</small>	294	1138	<b>Xbox Series X - 4K - LG C9 OL...</b> by ssandman <a href="#">↗</a> 14 Sep 2021 03:38
 <b>General VLC media player Troubleshooting</b> For questions and discussion that is <b>NOT</b> (I repeat <b>NOT</b> ) <b>specific</b> to a certain Operating System.	20093	66694	<b>log_set() by python-vlc modu...</b> by Sham8630 <a href="#">↗</a> 15 Sep 2021 07:35
 <b>VLC media player Translations</b> Everything related to VLC media player translations: new translations, corrections, ...	157	752	<b>Re: Caps lock translation err...</b> by Yaron <a href="#">↗</a> 12 Jul 2021 07:13
 <b>VLC media player Feature Requests</b> Feature requests for VLC.	6945	27872	<b>Detect DVD files automatical...</b> by postcd <a href="#">↗</a> 13 Sep 2021 10:50

# SO, WHAT'S THE CATCH?

- Useful feature for feedback classification
- Unmoderated user submission
- No study done on the accuracy of submissions




The screenshot shows a forum thread on VideoLAN. The breadcrumb navigation is: VideoLAN < Forum Home < VLC media player < VLC media player Feature Requests. The thread title is "[BUG] Vlc freeze when server is down". Below the title are buttons for "Post Reply", a dropdown menu, and a search box labeled "Search this topic...". The first post is by a user with a blue profile picture, titled "[BUG] Vlc freeze when server is down". The post content reads: "With vlc 0.8.5 windows  
Vlc freeze when the stream server is downing. The same problem occur when the stream is already finish, but Vlc still connect at server for a while waiting for the breakdown message.  
The stream is ended, stream server s going down, and vlc client go in loop, consuming 100% of cpu.  
I encounter already this problem with free (iliad) stream, and can reproduce the similart bug with stream server like Mediabase(Kasenna)." Below this is a reply from a user with a green profile picture: "Have you tried 0.8.6? BTW this section of the forum is for feature requests, not for bug reports."



# DATA COLLECTION



01 

## VLC MEDIA PLAYER FORUM

- Troubleshooting
  - Feature Request
- 

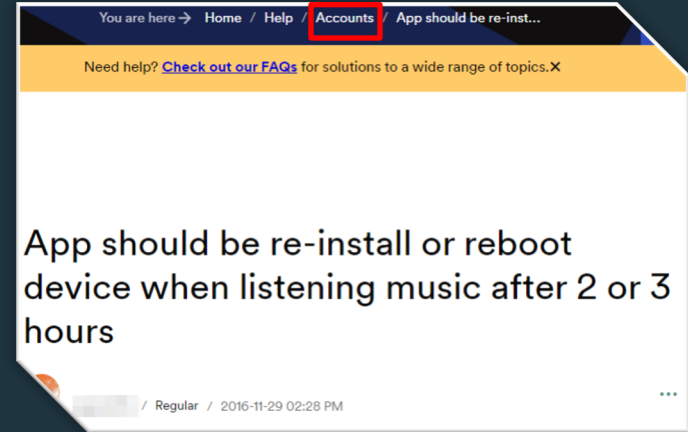
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## SPOTIFY HELP FORUM

- Windows Troubleshooting
  - Ideas(Feature Requests)
  - Accounts
  - Subscriptions
  - Premium Family
  - Premium Student
- 
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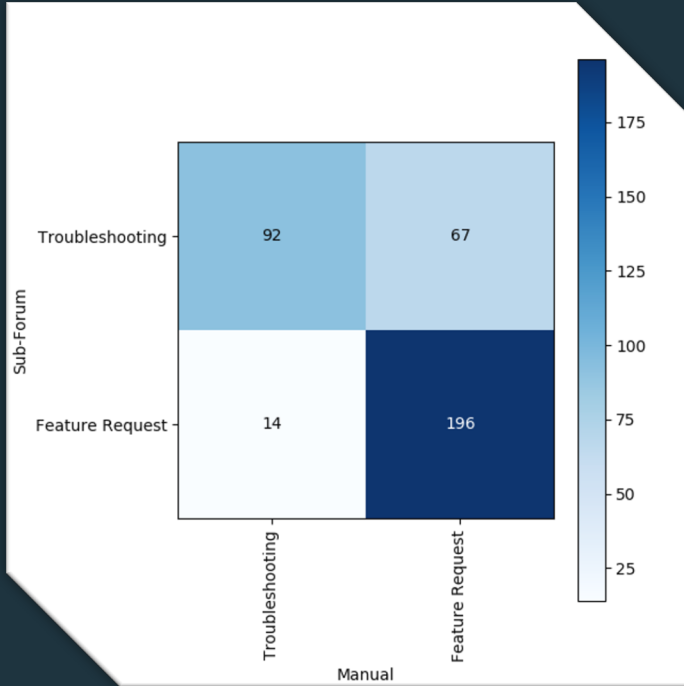
# MANUAL CONTENT ANALYSIS

- 800 post titles from VLC and Spotify
- Two experts individually labelled these titles
- Labels are from sub-forum categories
- 43 ambiguous or spam titles were removed from the dataset



Data set	Initial Agreement	Reconciled Agreement	Cohen's Kappa
VLC	70.9%	92.5%	84.8%
Spotify	84.0%	97.0%	96.4%

# MANUAL LABEL VS USER CATEGORISATION



# TAKEAWAYS

## SUB-FORUM CATEGORIES ARE NOT ALWAYS RELIABLE

- We shouldn't use sub-forum categories as a feature for classification task at this stage
- More than 20% of all posts are submitted into the wrong sub-forum

## FORUM DESIGNS CAN BE IMPROVED

- Sub-forum topics should be distinct and well described
- Using automation methods to assist user during post submission



# FUTURE WORK

- Explore specific reasons that leads to incorrect user submissions
- Examine whether or not incorrect submissions has an effect on the rate which issues/features are addressed by developers
- Post title + body for more context of each post
- Effect of incorrect submissions on classification tasks

THANK

YOU



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