Secure Software Development

Assignment D3: Defensive Reporting

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11.11.2020

Winter 2020/21, www.iaik.tugraz.at/ssd

Timeline

- Deadline D3: **8.1.2021 - 23:59:59**
- Points: 15% (+ 5% bonus)

Since you're now almost a security expert ...

Rumors ...

Since you’re now almost a security expert …

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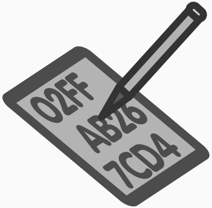
... let'z get in the shoes of a **software auditor**

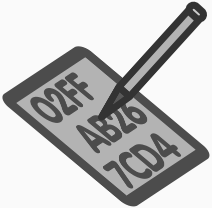
I DON'T CARE YOUR SSD SKILLS
I WILL FIND YOU, AND AUDIT YOU
imgflip.com

Code audit



- You get an existing code base to audit

Code audit



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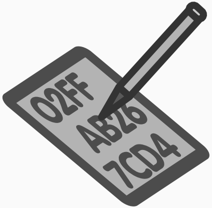
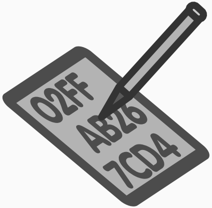


- You get an existing code base to audit
- You analyze it and report issues
- Our bug bounty program rewards you with points

Specification



- Trudel - simple web server written in C

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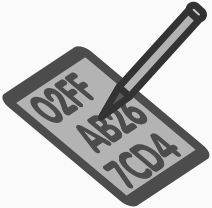

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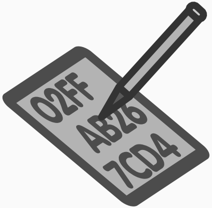

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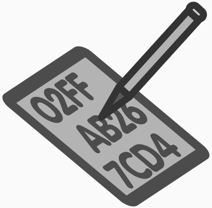

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  - Access Trudel at: `http://127.0.0.1:5000/`

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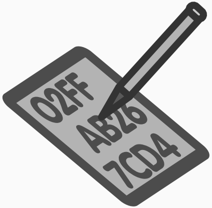

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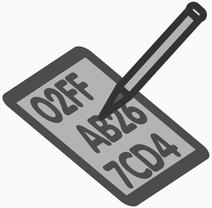

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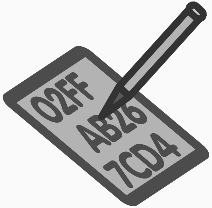

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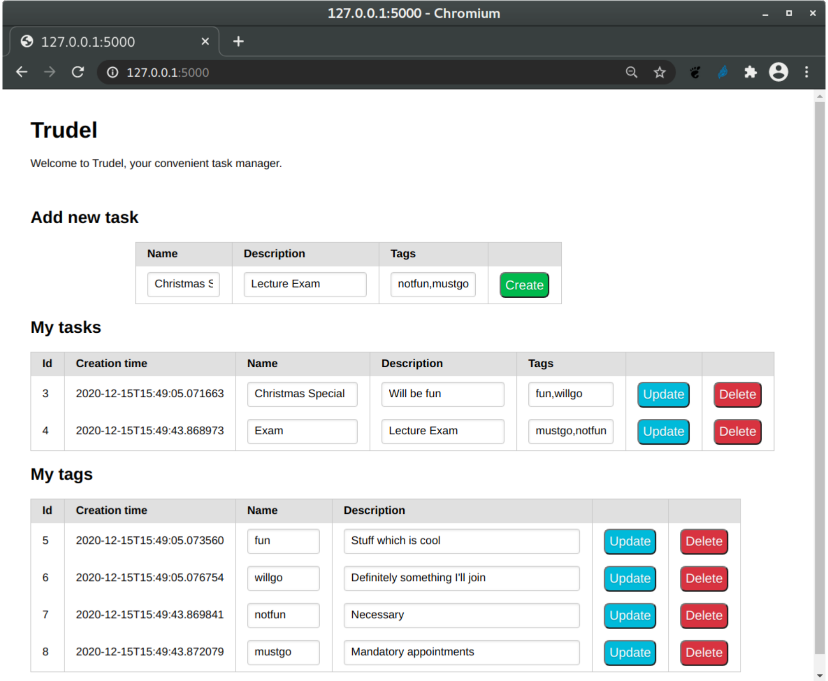
- You do not need to fully understand the spec in order to find some bugs



Trudel

Welcome to Trudel, your convenient task manager.

Add new task

Name	Description	Tags	
Christmas S	Lecture Exam	notfun,mustgo	Create

My tasks

Id	Creation time	Name	Description	Tags		
3	2020-12-15T15:49:05.071663	Christmas Special	Will be fun	fun,willgo	Update	Delete
4	2020-12-15T15:49:43.868973	Exam	Lecture Exam	mustgo,notfun	Update	Delete

My tags

Id	Creation time	Name	Description		
5	2020-12-15T15:49:05.073560	fun	Stuff which is cool	Update	Delete
6	2020-12-15T15:49:05.076754	willgo	Definitely something I'll join	Update	Delete
7	2020-12-15T15:49:43.869841	notfun	Necessary	Update	Delete
8	2020-12-15T15:49:43.872079	mustgo	Mandatory appointments	Update	Delete

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- Missing documentation is **not** an issue you get points for

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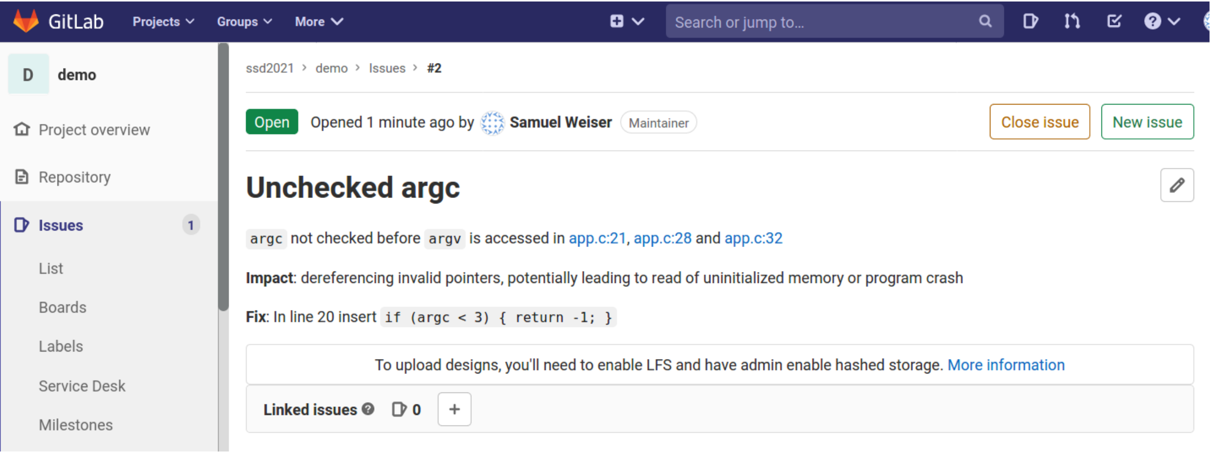
  - We only count **open** issues. If you close an issue, we won't count it.



Opened 1 minute ago by Samuel Weiser Maintainer

Unchecked argc

`argc` not checked before `argv` is accessed in app.c:21, app.c:28 and app.c:32

Impact: dereferencing invalid pointers, potentially leading to read of uninitialized memory or program crash

Fix: In line 20 insert `if (argc < 3) { return -1; }`

To upload designs, you'll need to enable LFS and have admin enable hashed storage. More information

Rumors continue ...

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- **Propose a fix**
  - Small fixes → Issue description
  - More complex fixes → Create new branch per issue and commit fix there, link it in issue

Live Demo

Any Questions?

Ducks ’n awards