WHY SHOULD WE CARE ABOUT KERNELNEWBIES!

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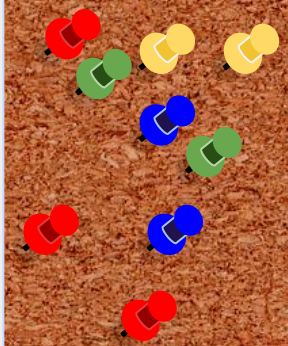
(@kernel_girl)

Who Am I?



ORACLE

Rails Girls
Summer of Code

OUTREACHY

Who is Kernelnewbie?

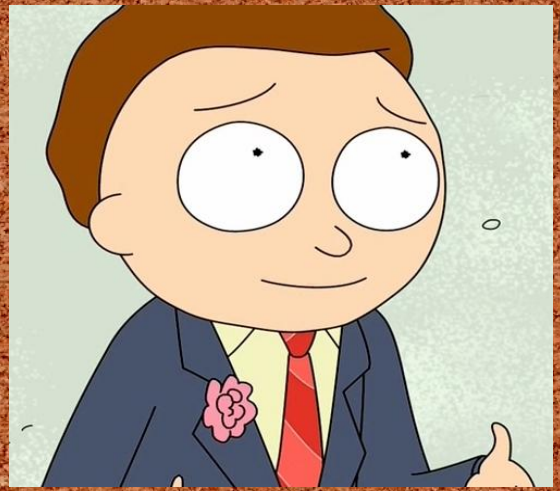
Type one:

- Open source newbie
- May or may not have formal computer science education
- Curious,enthusiastic, confused

Who is Kernelnewbie?

Type two:

- Belongs to open source world, new to Linux kernel
- Wants to contribute to Linux Kernel out of interest or job
- Curious, Excited, confused



Flow of Morty's Journey in a Linux kernel world

1.

Setting up an environment for the first contribution

2.

First successful contribution

3.

Find tasks/ projects for more valued contribution

4.

Quality contribution in the Linux kernel / full-time job

Why should you care about Morty's journey?

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- **Need of more kernel developers**
- **Kernel community works on trust**

Obstacles in Morty's journey

1: Setting up an environment

- First patch tutorial helps with setting up an environment but doesn't really talk about how kernel development process works

- It suggests checkpatch.pl fixes but not all subsystem maintainers are fine with accepting these fixes

- Different subsystems follows different workflow

Obstacles in Morty's journey

2: First successful contribution

- No specific time defined on when you will get reply or patch will get merged
- Emails == Chances of patches being lost
- Subsystem maintainers picks up the patches based on their work flow - no documentation on the same

Obstacles in Morty's journey

2: First successful contribution

- Patch tags - some prefers RFC and some don't
- Picky but not patient enough
- Rude behavior -> discourages Morty to continue their journey

Obstacles in Morty's journey

3: Find tasks for quality contribution

- **Not using version control development platform == no open issues**
- **TODO files in subsystems are not often updated**
- **Hard to find TODO tasks listed as comments in files**

Obstacles in Morty's journey

3: Find tasks for quality contribution

- **Maintainers/developers often have few ideas but do not have time to implement them because of the busy schedule**

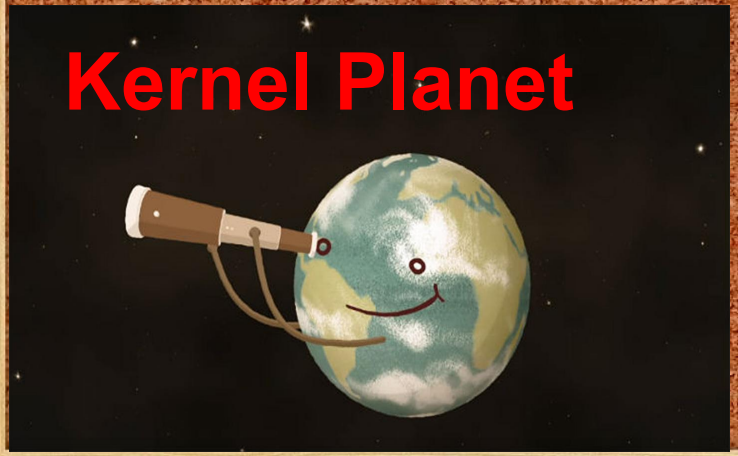
- **Newbies often looks more ideas but don't know where to find them**

Obstacles in Morty's journey

4: Quality contribution in the kernel

- Many times new tasks often requires discussions with the people before sending patches

- Mailing lists/IRCs works for some subsystems but having an information on whom to reach out can help when starting


Kernel Planet

Possible Solution

Possible Solution

Idea: A home to address the concerns

- **Website/Wiki**
- **Involve kernel developers/maintainers who are interested in building a bridge between kernel newbies and kernel developers / maintainers**

Things to be implemented

- **List of subsystems who are fine with receiving checkpatch.pl fixes and guiding kernelnewbies in their journey of first perfect kernel patch**

Things to be implemented

- **List of documentation available for each subsystem/kernel areas in a more organized manner**

Things to be implemented

- **Subsystem wise TODO list of tasks (Similar to github's help needed/beginner friendly tags)**

Things to be implemented

- **Subsystem wise assigned list of reviewers or developers who wants to help in reviewing patches**

Things to be implemented

- **List of more ambitious projects [Just a bunch of possible ideas from developers/maintainers]**

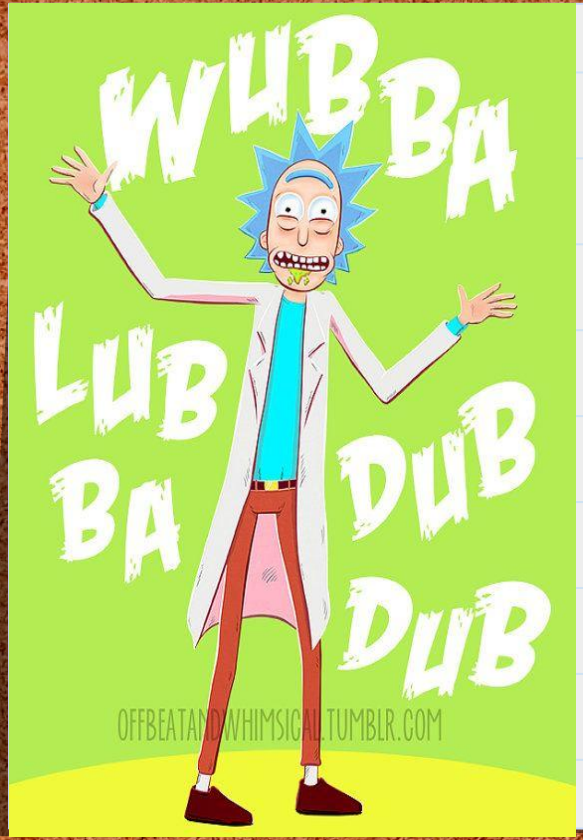
[RFC] Solutions I'm not sure about

- **Problem:** Behaviour
- **Solution:** Code of conduct, basically something that says you'll not shout if the patch takes multiple revisions and bit of a time

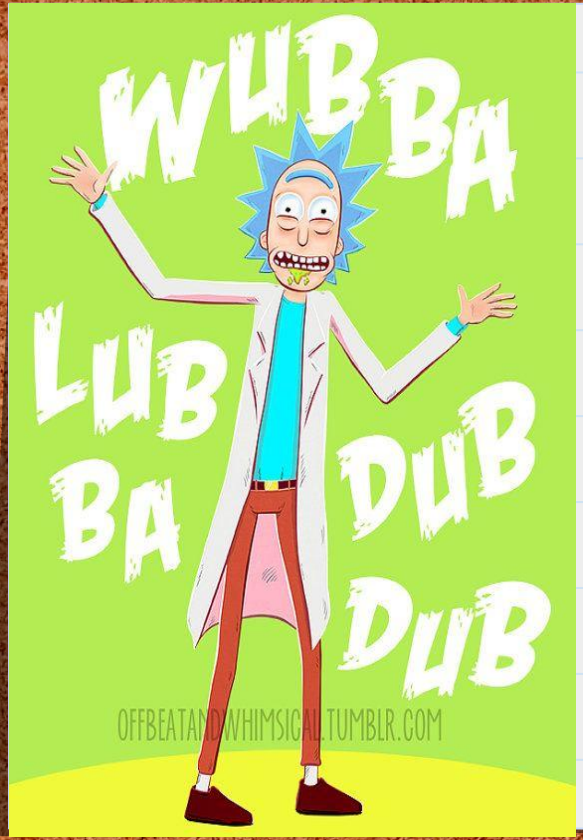
[RFC] Solutions I'm not sure about

- **Problem:** No docs on subsystem wise development process

- **Solution:** Document the subsystem wise process of sending patch to patch being merged [approx time?]



More ideas?



More ideas?

[https://github.com/nerdyvaishali/kernelbridge]

Resources

- Google.com
- Adult Swim - Rick and Morty