GameDroid: A GameBoy Emulator for Android

Project Proposal

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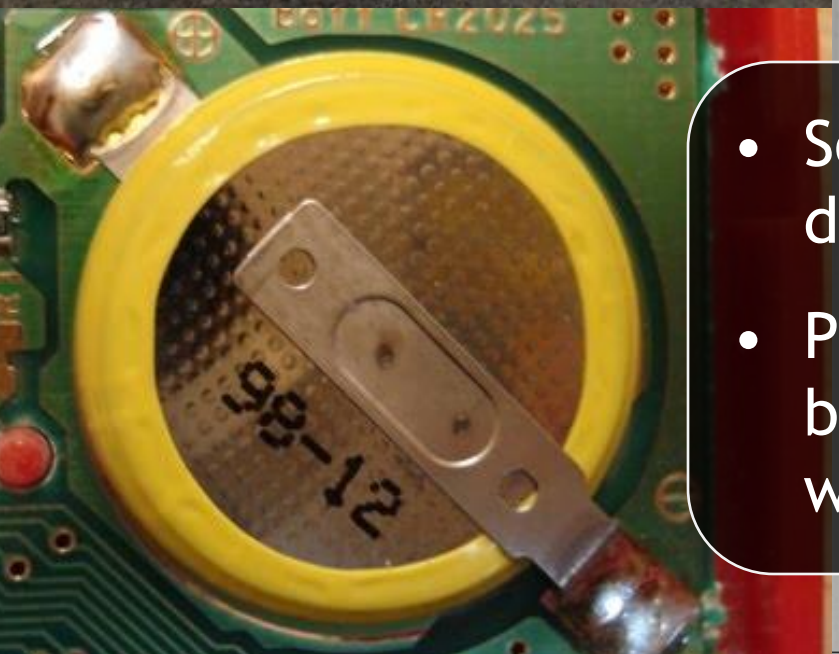
Problems

- Old games are great but it's not 1989 - carrying all that extra hardware around isn't practical
- Choosing and swapping games takes time!



- Some games don't save, those that do lose this ability over time
- Power-hungry GameBoy eats 4 AA batteries and has a small screen with a low resolution (160 x 144)

Solutions emulation provides

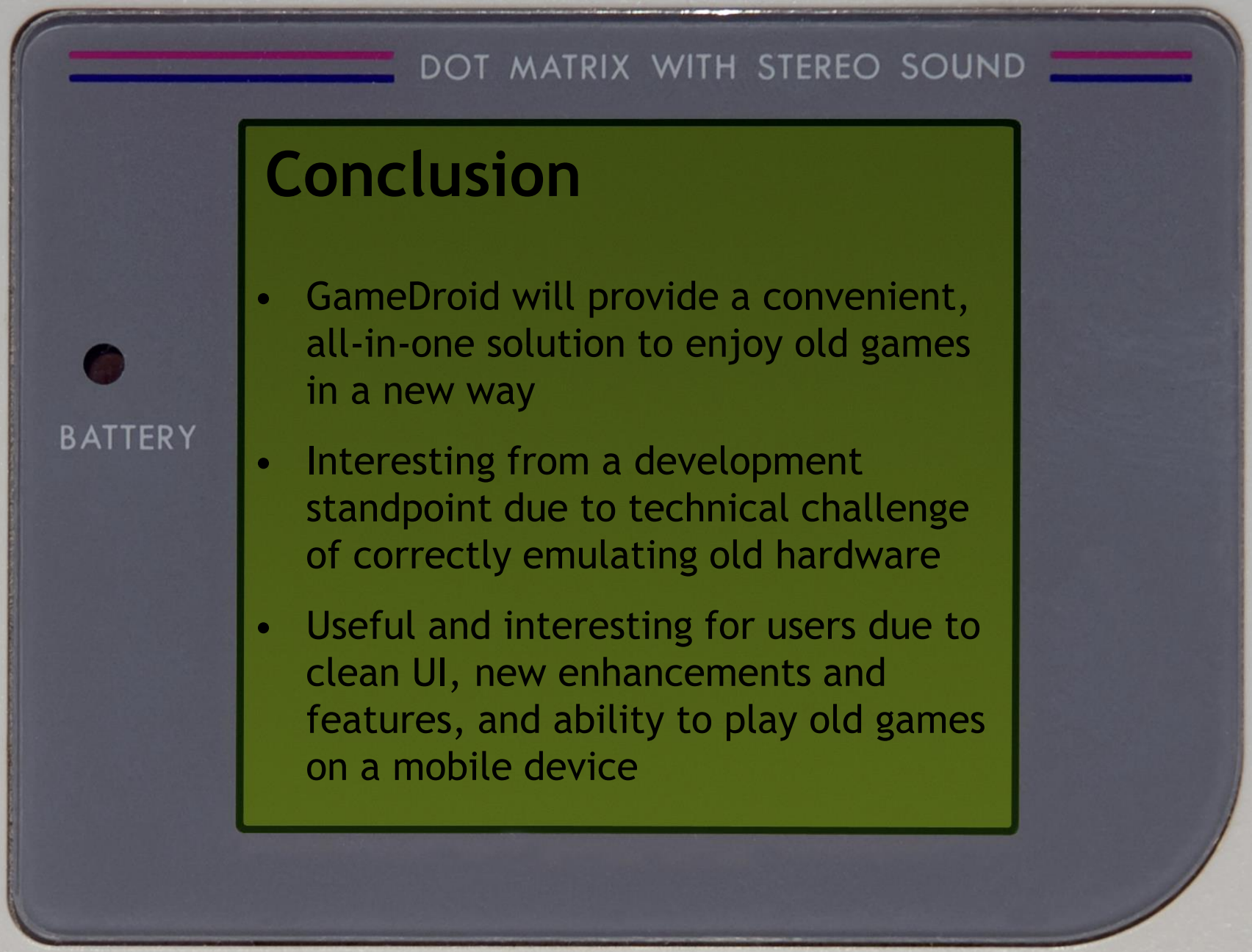
- Store massive game library in one place (all GameBoy games ever made = ~600MB)
- Emulator will have full access to hardware state – can save/load the game at any time even if not originally supported

- Other enhancements: upscaling, easy library organization and searching
- No hassle, easy to quickly use to kill time (in transit, during a lecture, etc.)
- Users already carry mobile devices. No need for any extra hardware

Don’t these exist already?

- Mobile emulators typically lack features and good design patterns
- Focus on clean, intuitive user interface, well-organized library, and ease of use
- Addition of new feature: rewind gameplay up to 30 seconds

- Opens old games up to new audience not used to “Nintendo hard” games
- More forgiving gameplay lessens frustration



Conclusion

- GameDroid will provide a convenient, all-in-one solution to enjoy old games in a new way
- Interesting from a development standpoint due to technical challenge of correctly emulating old hardware
- Useful and interesting for users due to clean UI, new enhancements and features, and ability to play old games on a mobile device