Productivity Bot

By Team BHADS:

Brett Noneman, Harry Leverone, Aaron Lambert, Danny Spatz, Sonny McMaster

Problem Statement

How can we introduce a <u>virtual</u>
<u>assistant</u> to SE's that <u>boosts</u>
<u>productivity</u> through features that
help the engineer stay <u>focused</u> and
in a <u>good mental state</u> while
working?

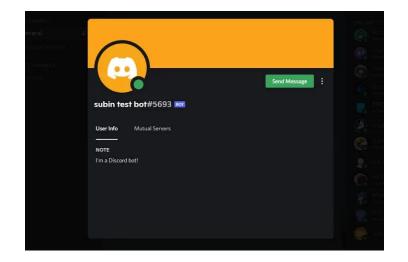


Proposed Solution

We propose a discord bot:

- Manages breaks
 - Built in timer user can start/stop/set
- Jokes for boosting morale
 - Gives bot personality and more interactivity
- Rubber duck debugging
 - Helps programmer problem solve





How does this benefit software developers?

- Improved time management
 - 39% of employees felt more productive after a break, according to a survey from Workforce.com
- Improves time savings and ease of use during debugging
 - Depending on which research you look at, developers say they spend 25–50% of their time on debugging
 - Even a 5-10% time savings would be a big help
- Improves team morale with jokes and lightening the mood in general
 - Sometimes software development can be really frustrating, but a little joke from the bot could improve your mood and your productivity as a result



Use Case



Use Case: SE Productivity Timer

1 Preconditions

The user has been working for a prolonged period of time. This time can be changed depending on the day and the users preferences/needs

2 Main Flow

Discord bot creates a break notification [S1], bot starts a timer that counts down to 0 [S2], bot creates return notification [S3]

3 Subflows

- [S1] The discord bot will create a pop up with a calming sound, letting the user know that it is time to take a break
- [S2] Discord bot will start a timer that is displayed on the screen that counts down until it reaches 0
- [S3] When the timer is up, another calming sound will play, letting the user know it's time to return to working

4 Alternative Flows

[E1] User can elect to disable the timer and continue to work

Sources

- B, Subin. "How to Make a Discord Bot." Beebom, 3 Mar. 2022, beebom.com/how-make-discord-bot/.
- Barymov, Oleksandr. "Freelancer, Software Developer, Programmer, Coder Vector Illustrator." Vecteezy, Vecteezy, 4 Jan. 2023, www.vecteezy.com/vector-art/16746979-freelancer-software-developer-programmer-coder-vector-illustrator.
- "Rubber Duck Debugging Method: How to Study More Effectively: Ubis." *UBIS University of Business Innovation and Sustainability*, 2 Dec. 2022, ubisglobal.com/blog/get-a-rubber-duck-how-to-make-your-study-time-more-effective/.
- Systems, Symbol, et al. "Istock." iStock, www.istockphoto.com/photos/clock-ticking. Accessed 22 Sept. 2023.
- Faruggia, JD. "Workforce Management Software News, Blog, and Resources." *Workforce.Com*, 30 Aug. 2022, workforce.com/news/5-lunch-break-statistics-that-shed-light-on-american-work-culture.