BUG TRACKER

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INTRODUCTION

- Issues seem to always arise in finished products or systems, regardless of the resources used in their development.
- This project aims to significantly improve the bug tracking and resolution process by:
- Properly equipping teams with tools necessary to receive the bugs from customers.
- Enabling efficient task and team allocation for each bug in a personalized manner for the customer.
- Providing quality-of-life tools to ease team management.

METHOD

Project Management:
- Admins can add new projects and then share the project ID publicly.
- Customers can sign up and reference their project of concern in their bug report using its publicly released ID.

Bug Tracking and Resolution:
- Admins can view reported bugs, form teams, and assign tasks for each bug.
- The team lead for each bug can update the customer, ensuring greater personalization.
- Customers can track the status of their reports as they progress through the resolution process ensuring transparency.

Team Coordination:
- Staff can transfer tasks between each other seamlessly.

Additional Features:
- A calendar for adding events.
- A chat application for staff-to-staff interaction.
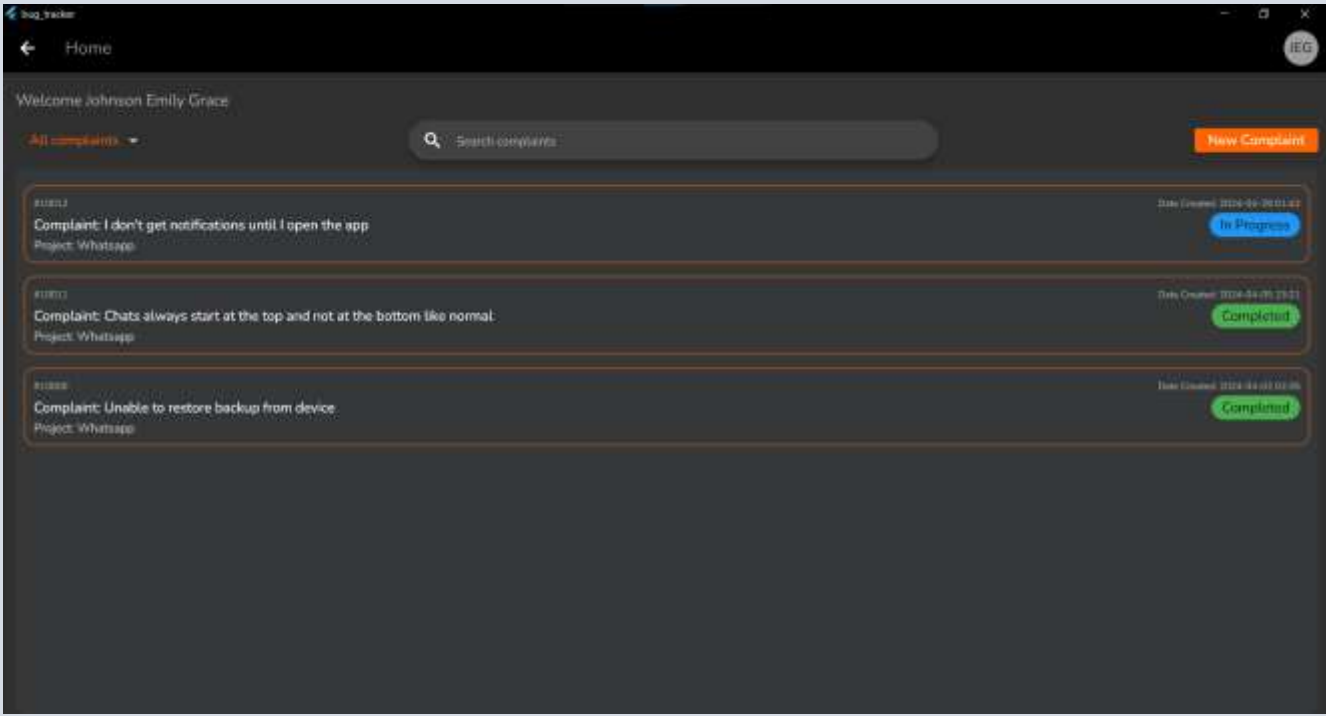- Time tracking for tasks.

UI Samples

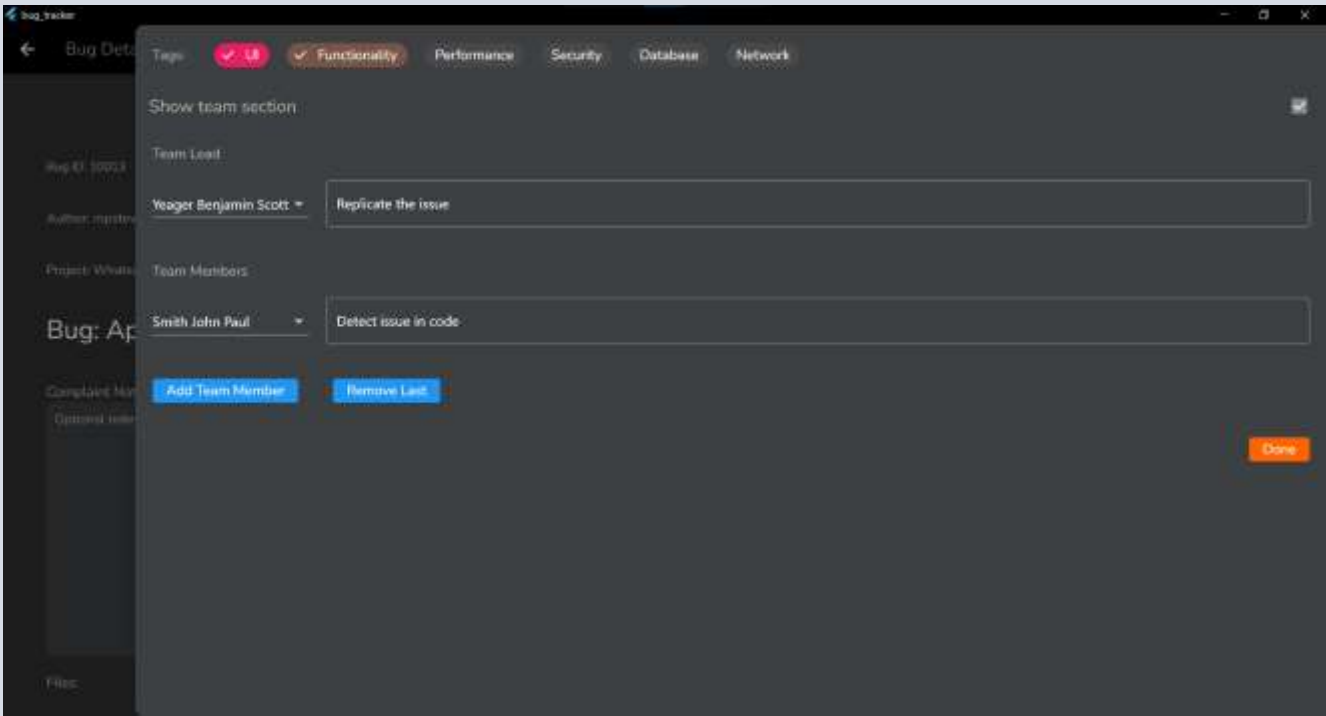Figure showing a user's home page

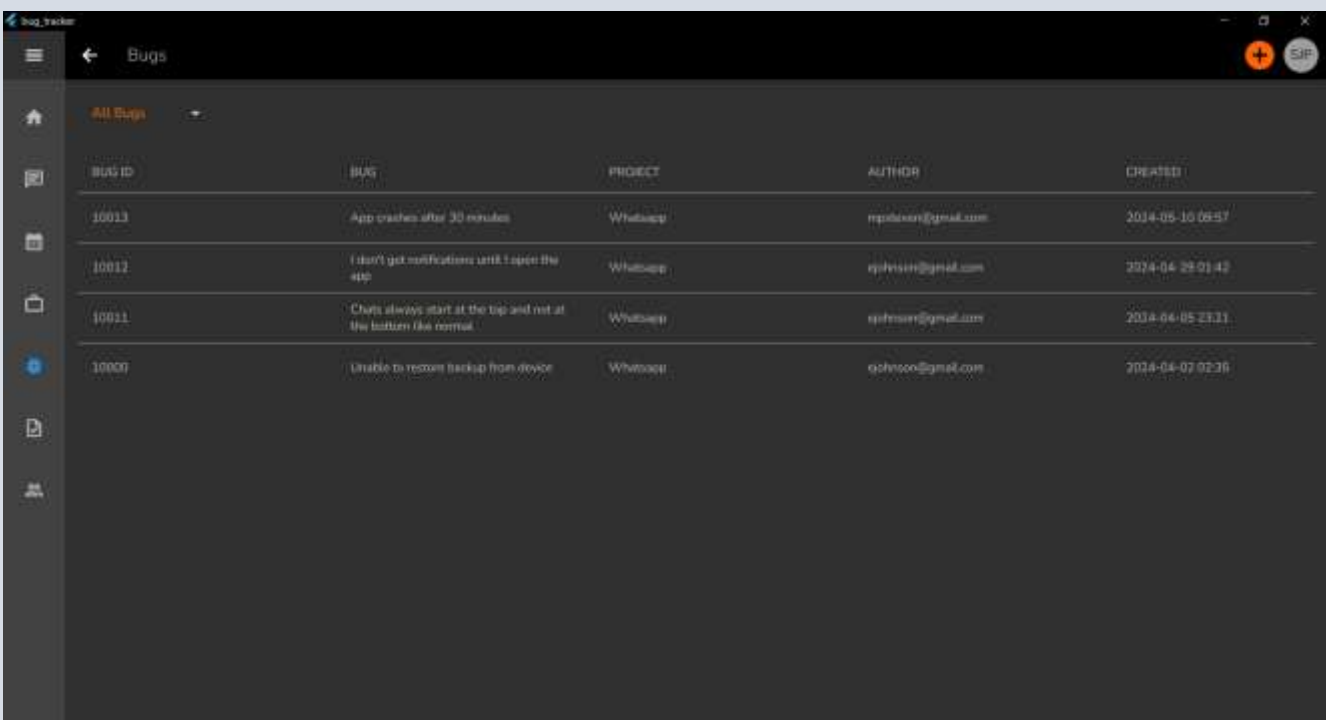Figure showing the task assignment process

Figure showing the admin's view of submitted bugs

Figure showing the time tracking feature in action

RESULT

- The research and development of this project have yielded significant improvements in the bug tracking and resolution process
- A solid database design is essential, this process has involved making constant revisions as the requirements are updated.
- The tables can be grouped into 4 major sections as can be seen in the graphic.
- All interconnected tables are related by one-to-many relationships
- Good User Interface design is also crucial as it counts in making the entire process efficient.

CONCLUSION

- In concluding, a few things can be said regarding the future of the project concerning future improvements
- **Artificial Intelligence:** An artificial intelligence (AI) agent serving as a first point of contact for reporters in case of trivial or easy to solve reports
- **Scalability Improvements:** Optimizing the database and data representation in the UI to handle larger volumes of bug reports, ensuring it remains efficient as the user base grows.
- **Advanced Analytics:** Advanced analytics for deeper insights into the data; including staff productivity and insights on recurring issues.
- By continuously refining the tools and methods used, and expanding the system's capabilities, this project can significantly improve the efficiency and effectiveness of bug tracking and resolution in the future.