**Docker Integration Summary Report**

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**Introduction**

This report explains how Docker was used in our project, focusing on how we set it up, the benefits it brought, and how it affected our work overall. Docker is a tool that lets us package our app, so it runs the same way everywhere, which is helpful for group projects and sharing code.

**Setup Process**

Setting up Docker for our project started with writing a Docker file. This file tells Docker how to build and run our app. We used the official .NET 7.0 images, so we didn’t have to worry about installing .NET on every computer. The process involved copying our project files into the Docker image, restoring dependencies, and publishing the app for Linux. At first, it took some time to understand how Docker file commands work, but after a few tries and checking online guides, it became easier. Once the Docker file was ready, building and running the app was just a matter of a couple of commands.

**Efficiency Benefits**

Using Docker made our workflow a lot smoother. Since everything the app needs is inside the container, we didn’t have to deal with “it works on my machine” problems. The app started up quickly, and we could be sure it would behave the same way for everyone on the team. Docker also made it easier to test and update the project, since we just had to rebuild the image if anything changed.

**Impact on Project Execution**

Docker helped us save time and avoid setup issues. New team members could get started fast, and we didn’t have to worry about different operating systems or software versions. Overall, Docker made our project more reliable and easier to manage, which was a big help for meeting deadlines and working together as a team.

**Conclusion**

In conclusion, using Docker for our project was a positive experience. It helped us get our app running consistently for everyone, made the setup process much simpler, and allowed us to work more efficiently as a team. While there was a bit to learn at the start, the benefits of having a reliable and easy-to-manage development environment made it well worth the effort. Docker made a big difference in how smoothly our project went.