My artifact is a small ball physics project that simulates one or more balls bouncing off blocks and each other, inspired by the game Brick Break. I first created it in CS-330 while learning OpenGL in C++, and it became my first real application using the OpenGL API. I chose to include this artifact in my ePortfolio because it marked an important milestone in my learning, and I selected it for enhancement as a way to challenge myself by converting it from C++ to Java, which is a task that proved demanding but rewarding. The process highlighted my ability to translate existing work into a different system without losing functionality while also uncovering opportunities for optimization.

During the enhancement, I went beyond my original plan of a direct conversion. Along the way, I discovered messy and redundant code, which pushed me to clean it up, remove unused functions, separate classes into individual files, improve documentation, and upgrade the movement system from eight directions to a full 360-degree range. This project reinforced an important lesson: even when something works, there is always room to refine, improve, and make it more efficient. The biggest hurdle was setting up LWJGL in my IDE, since I had never integrated that library before, but once it was configured, the rest of the work centered mostly on fixing syntax and ensuring smooth interaction with the API.