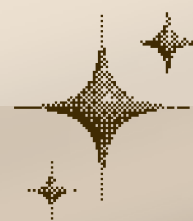
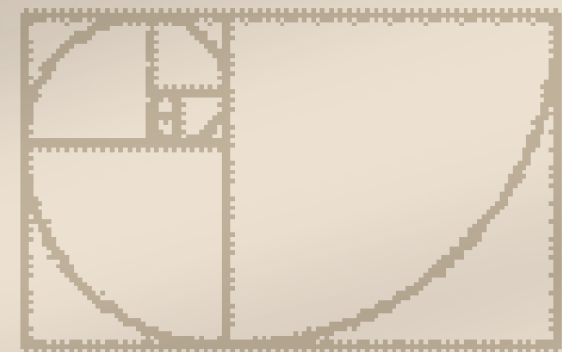


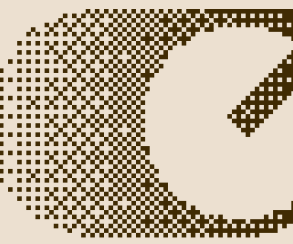
# GRADE 12 PORTFOLIO PROJECT



Krishna Patel

# PROJECT OVERVIEW

My Grade 12 Portfolio Project represents the culmination of my high school computer science education. Building upon the foundational knowledge gained in Grades 10 and 11, this project involves advanced concepts such as multi-dimensional arrays, file handling, and object-oriented programming (OOP) in the C++ programming knowledge. Additionally, my portfolio showcases three games that I created using the C# programming language, a language I independently learned without any formal knowledge.

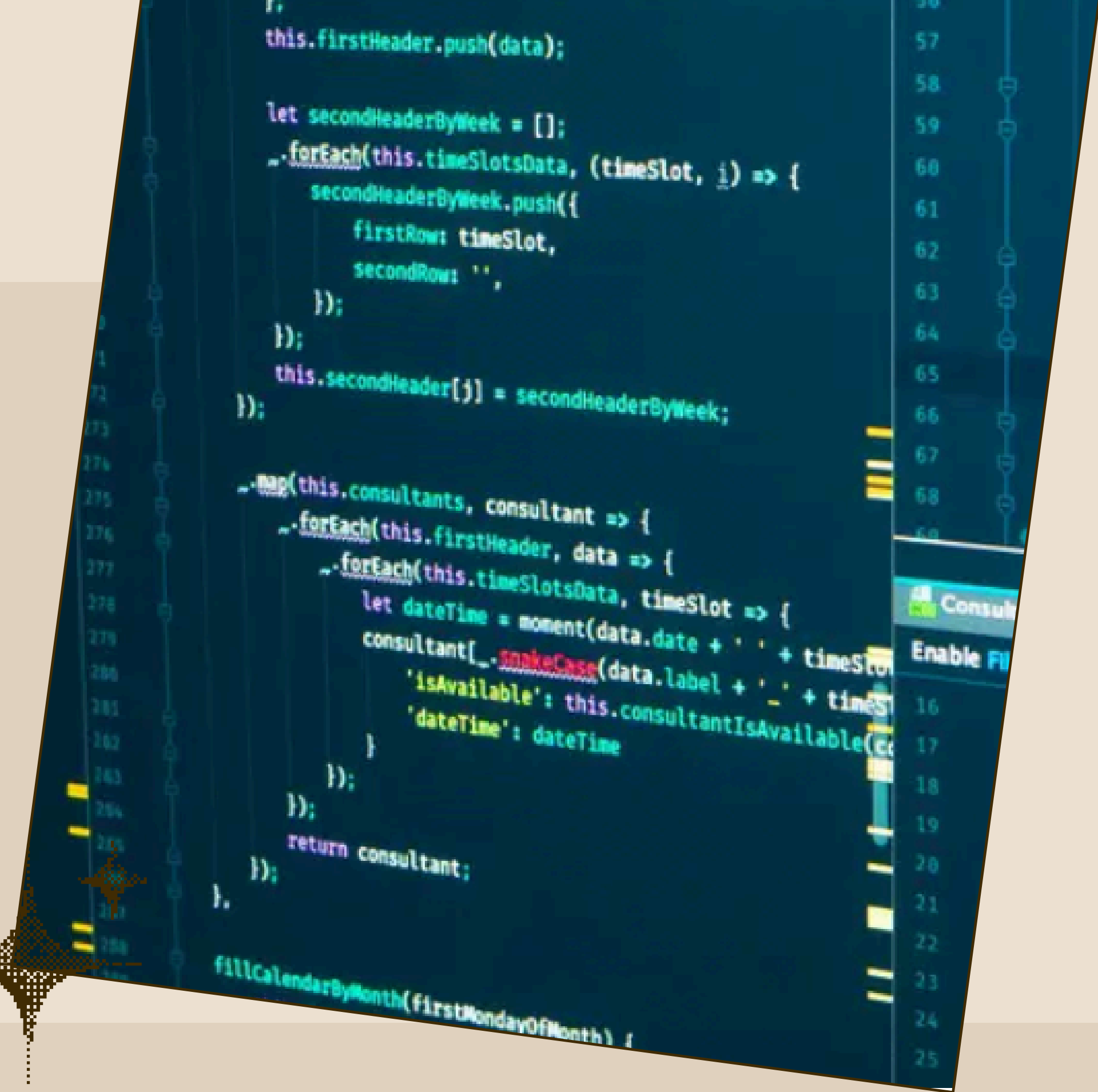


# BACKGROUND

In Grade 10, I began my journey in computer science with an introduction to basic programming concepts, including input/output, decision-making, structures, looping, and an introduction to subprograms using the C++ programming language. This course laid the groundwork for my understanding of how to approach problem-solving in programming.

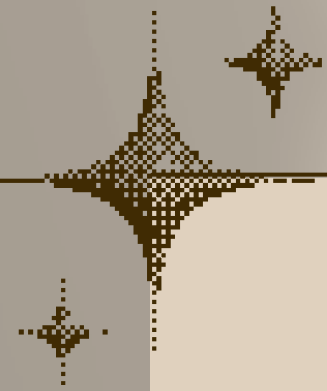
In Grade 11, I continued to develop my programming skills by exploring more advanced concepts such as subprograms, parameters, arrays, strings, and searching/sorting algorithms. This course helped me solidify my understanding of how to manage and manipulate data efficiently.

This previous knowledge equipped me with the skills necessary to successfully complete my Grade 12 computer science course and build a comprehensive portfolio project.





# C# OVERVIEW



I have independently learned C# and completed three projects using this language. This experience was entirely self-driven, involving trial and error, which allowed me to deepen my understanding of programming concepts beyond the classroom curriculum. These projects have not only enhanced my technical skills but also prepared me to tackle the challenges of independent learning and complex problem-solving—skills that are crucial in my future career as an engineer. This experience has given me the confidence to take on real-world engineering challenges, where innovation, adaptability, and self-motivation are key to success.

