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# Team

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| # | Roles in the team |
| 1 | Gabriel Yanchev – Scrum Master |
| 2 | Zlatin Lazarov – Back-End developer |
| 3 | Cvetomir Stoilov – Front-End developer |

# Introduction

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| # | Introduction |
| 1 | *What is the product?*  CodeNova is a cutting-edge project designed to create and sort genetic sequences based on user-defined traits. It allows users to specify desired characteristics, and the tool intelligently generates plausible DNA/RNA sequences corresponding to those traits. |
| 2 | *Main stages in the realization?*  First Week – Create the idea and discuss how to go about it  Second Week – Study our field  Third Week – Start programming Fourth Week – Make final touches |
| 3 | *Communication?* Communication was realized through Microsoft Teams. Thanks to all the features and the provided visualization – on-screen communication and feedback were sufficiently completed. |
| 4 | *What technologies were used?* We used Visual Studio 2022 as IDE, C++ as a programming language, Microsoft Word for documentation, Microsoft Teams as a communication tool, Adobe Photoshop and Adobe Illustrator for the logo, Microsoft PowerPoint as a presentation tool, and Git and GitHub as a collaborative workplace. |

# Method and manner of implementation

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| # | Method and manner of implementation |
| 1 | *Productive work.* The tasks are presented in a way that everyone is aware of what’s done and what isn’t so that teamwork is more efficient and productive. |
| 2 | *Distribution of tasks* Each task is assigned to the team member who’s most familiar with the field and would be able to complete it in the best and most efficient way possible. |
| 3 | *Communication* The progress was constantly observed by the Scrum Master. Weekly meetings were held so that everyone had up-to-date information about the state of the project and tasks could be distributed evenly and efficiently. |

# Summary

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| The program helps comprehend genetic sequences in a fun and accessible way. It has generating and sorting features and can also display the traits related to a sequence next to it for even better user experience. |

# Libraries

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| # | Which Libraries did we use? |
| 1 | *<Windows.h>* It contains declarations for all of the functions in the Windows API. |
| 2 | *<conio.h>*  It includes inbuilt functions like getch() and clrscr(). |
| 3 | *<vector>*  It includes vectors and functions related to them. |
| 4 | *<map>*  It includes maps and functions related to them. |
| 5 | *<string>*  Provides support for such objects with an interface similar to that of a standard container of bytes, but adding features specifically designed to operate with strings of single-byte characters. |

# Block scheme

