Graphical Representation Of Stack Operations

Team project members:

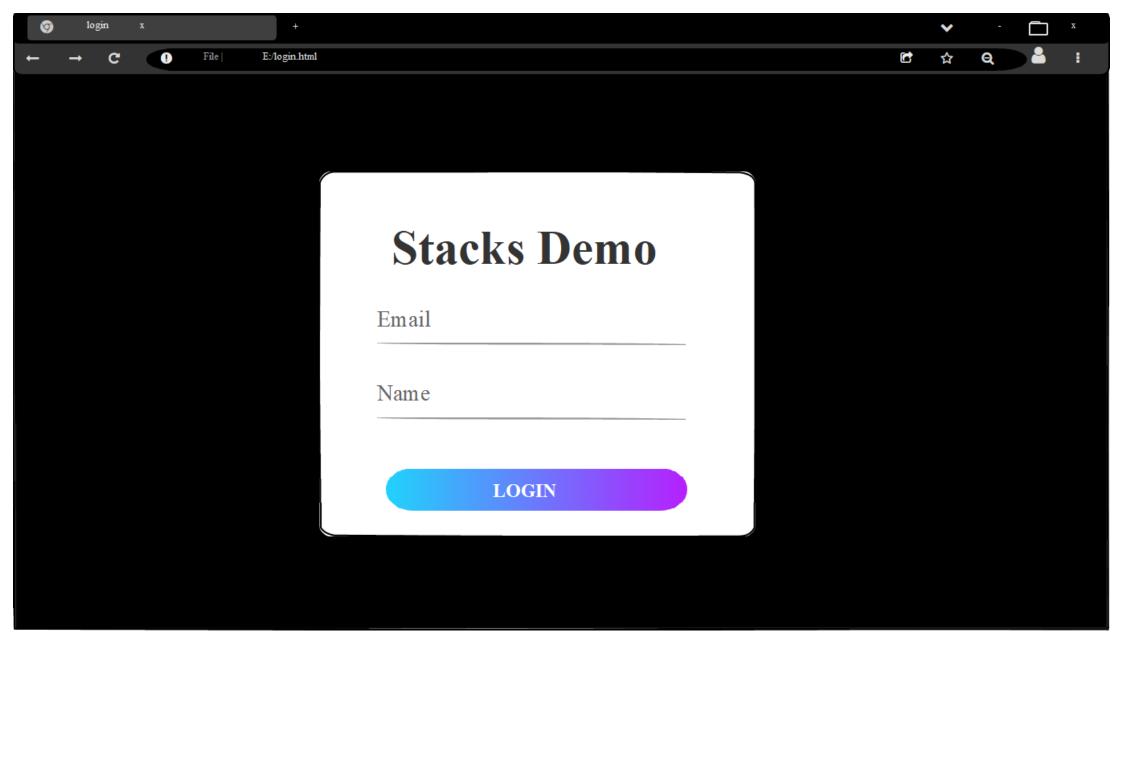
Name - SRN

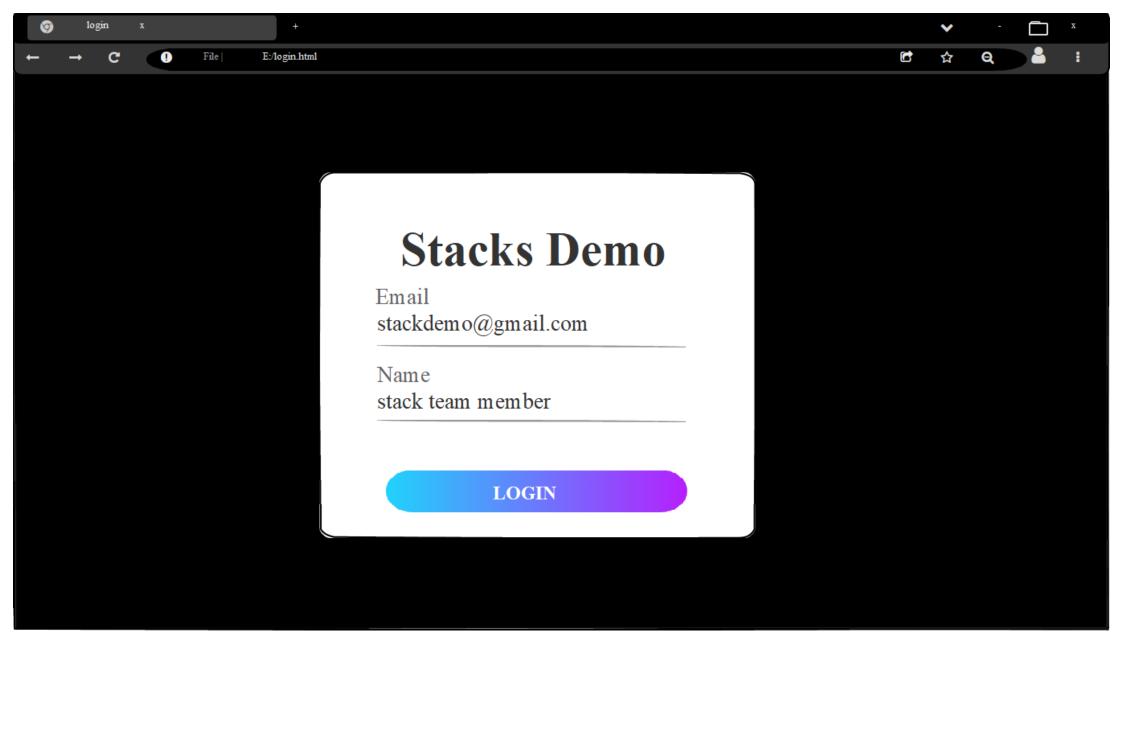
Karthik Sarode - PES1PG21CA030

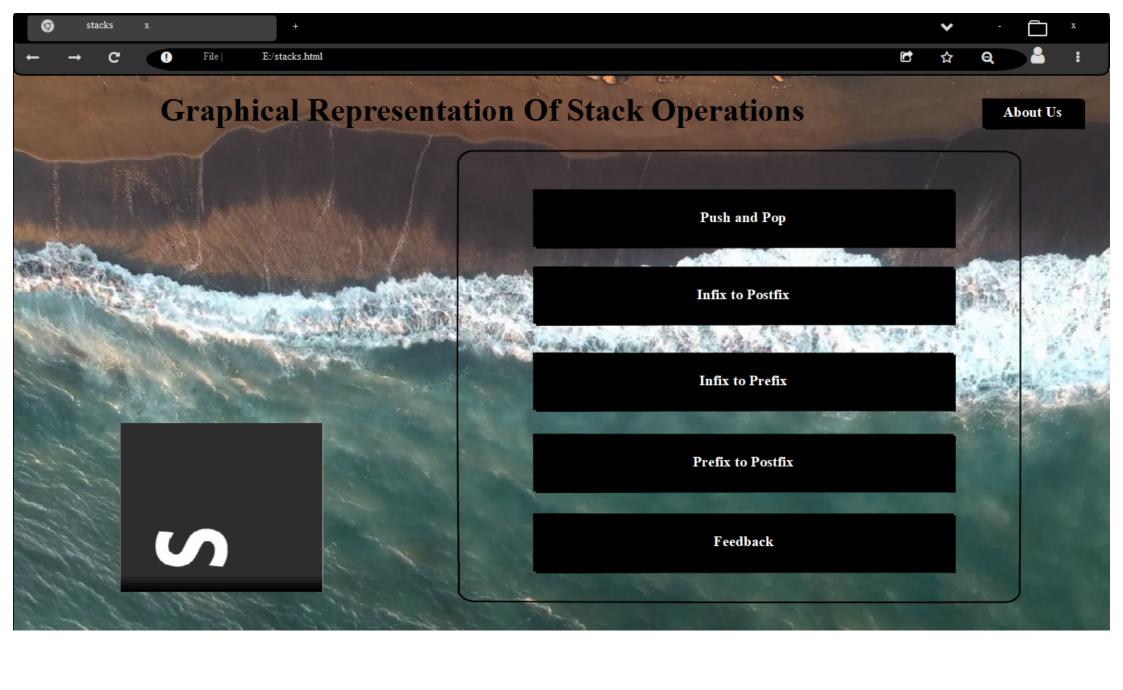
M. Sasikumar - PES1PG21CA038

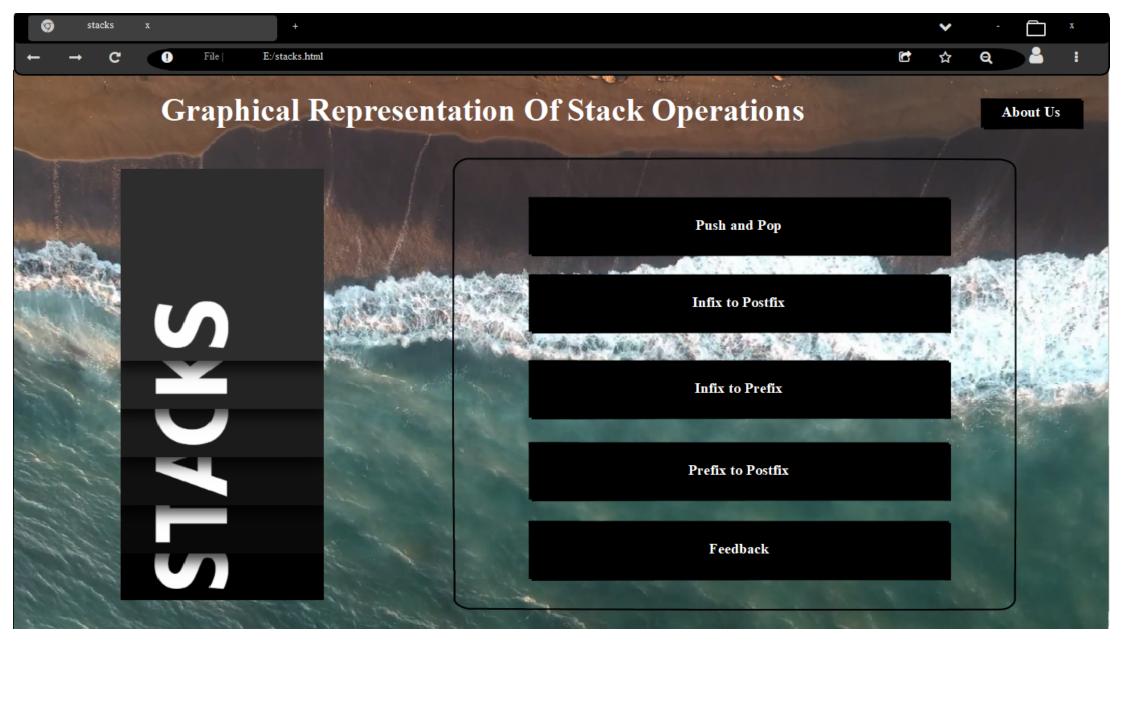
Narayana .P - PES1PG21CA048

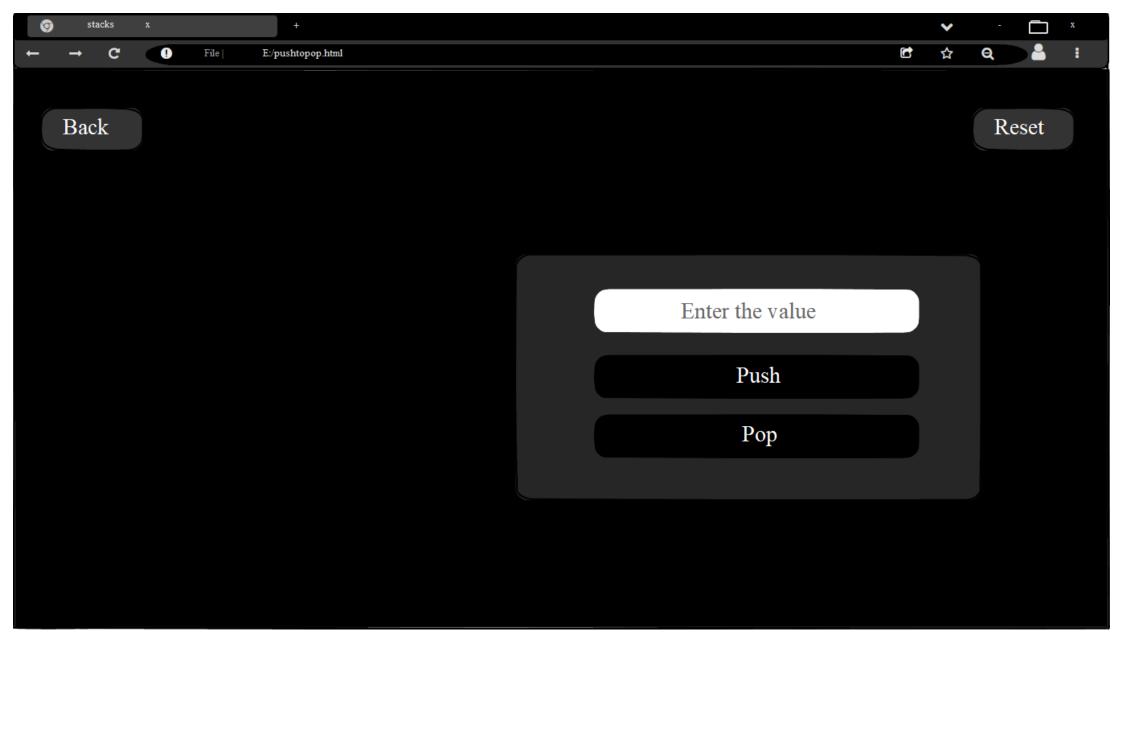
Karthik R Bhat - PES1PG21CA031

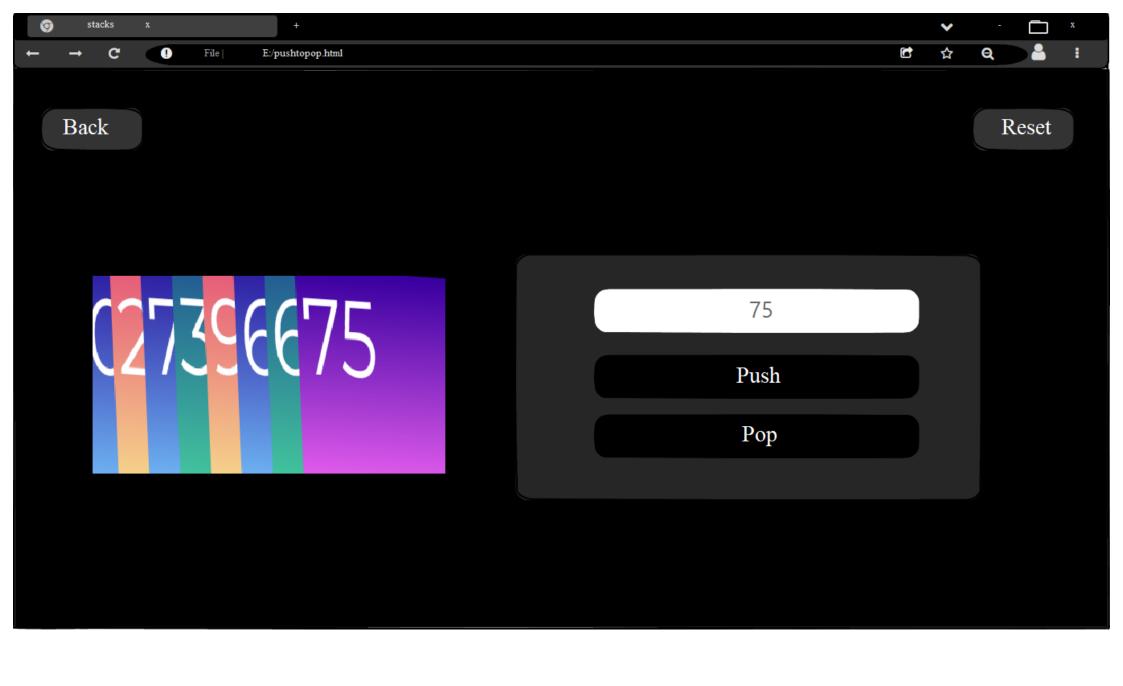


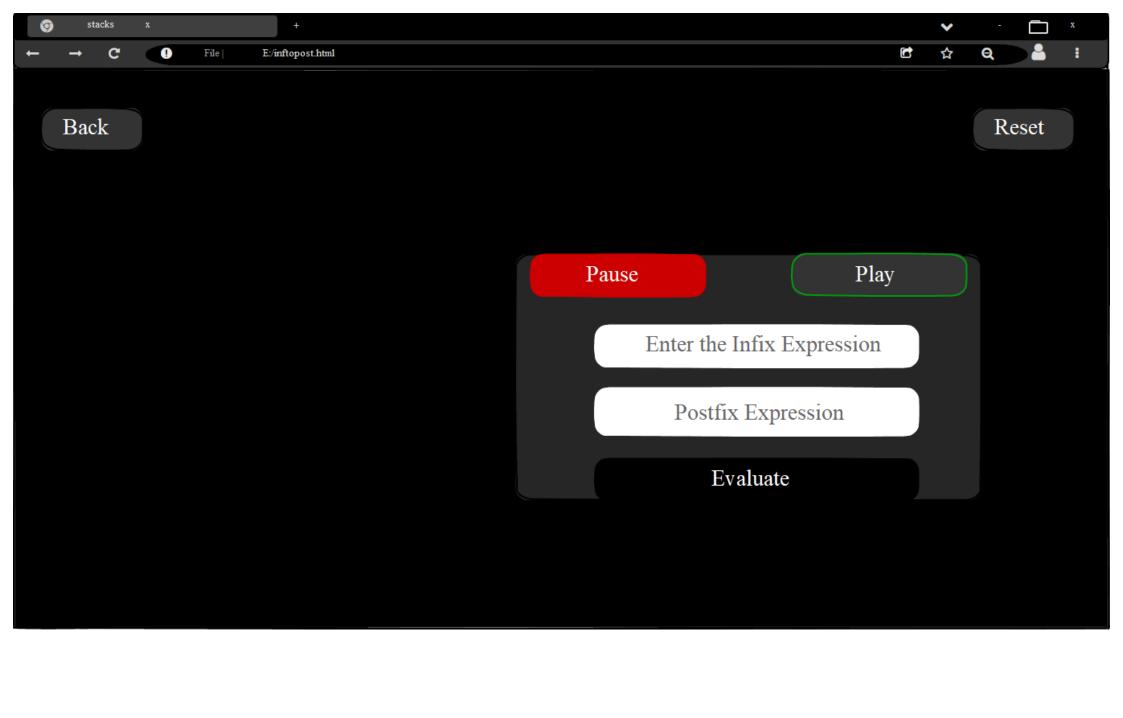


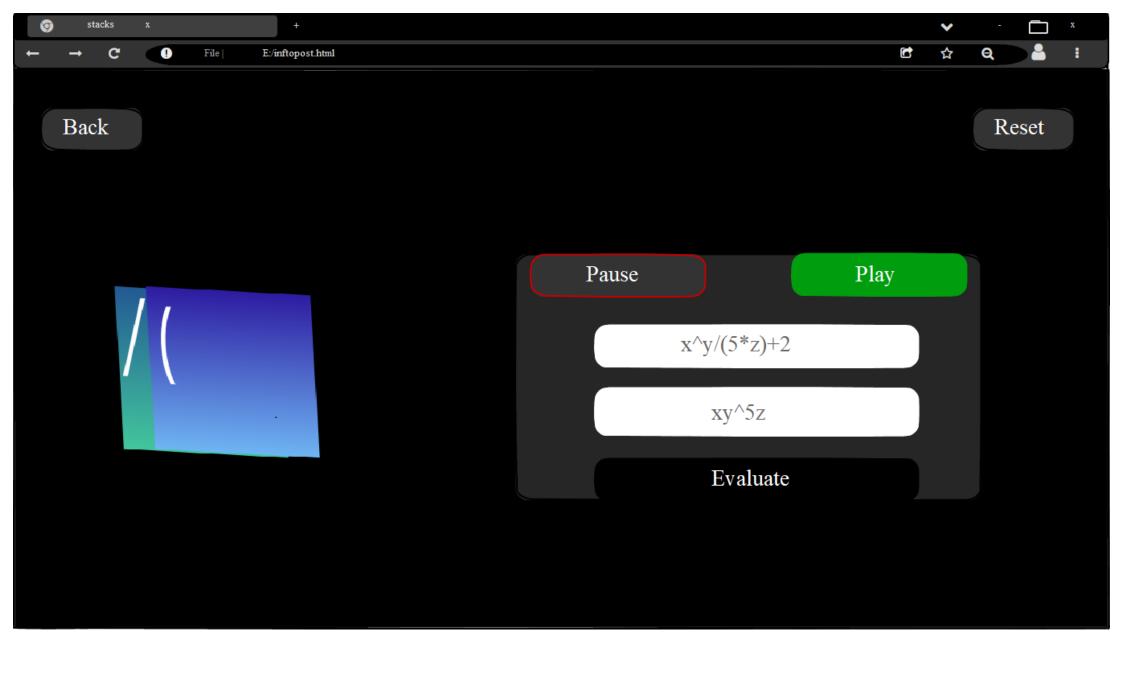


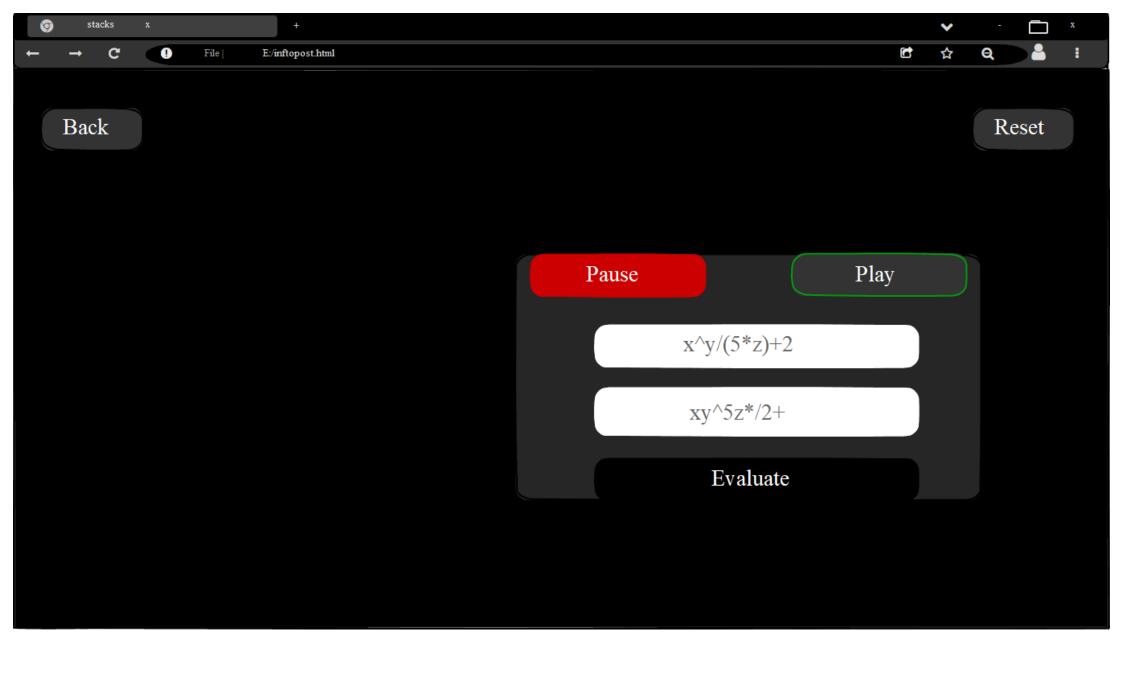


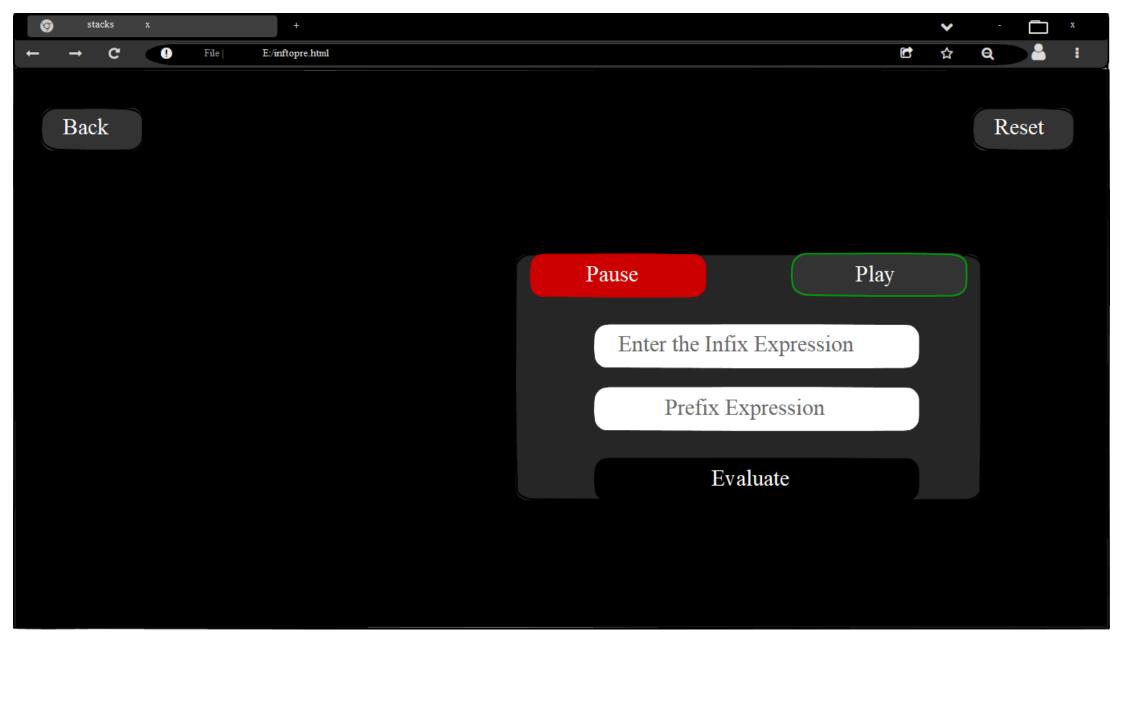


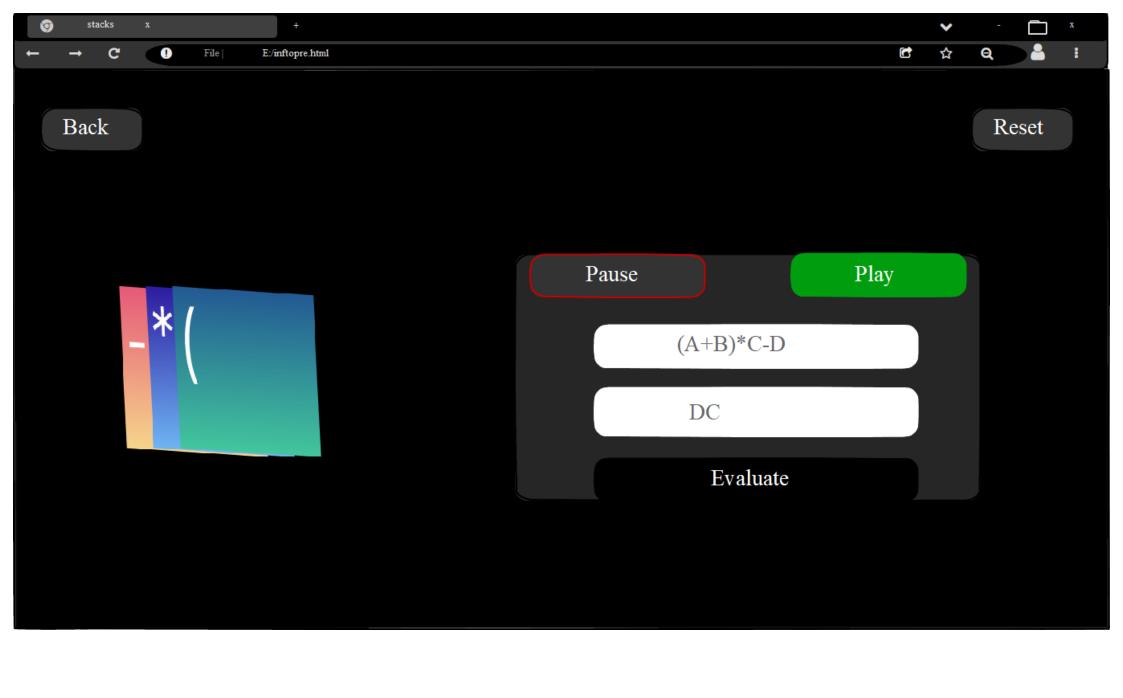


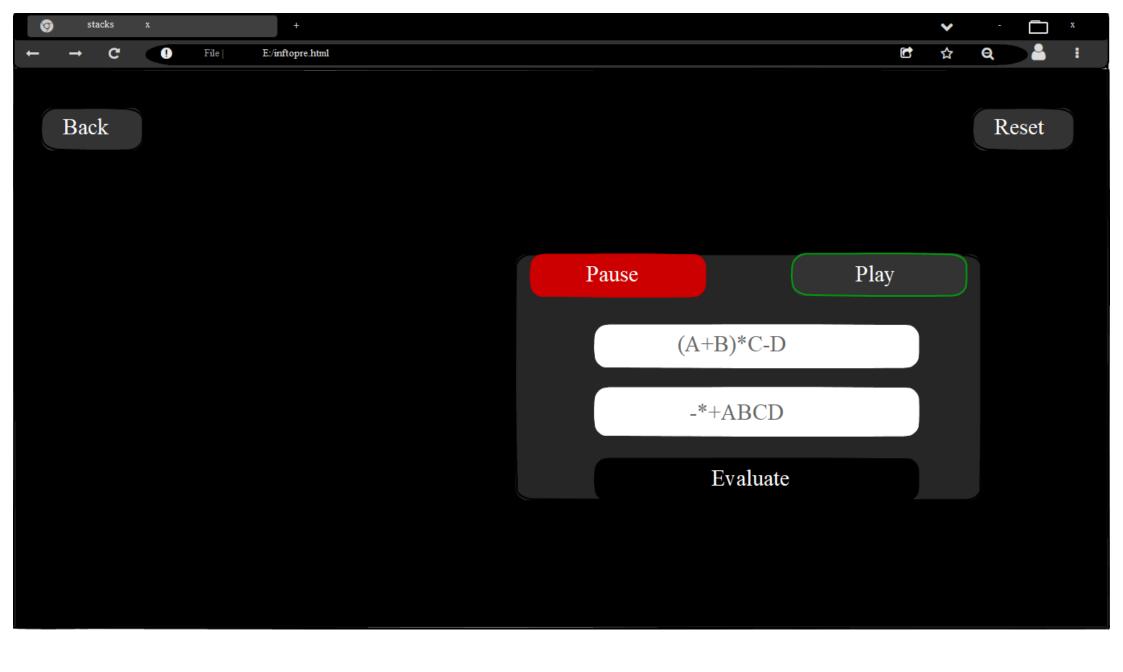


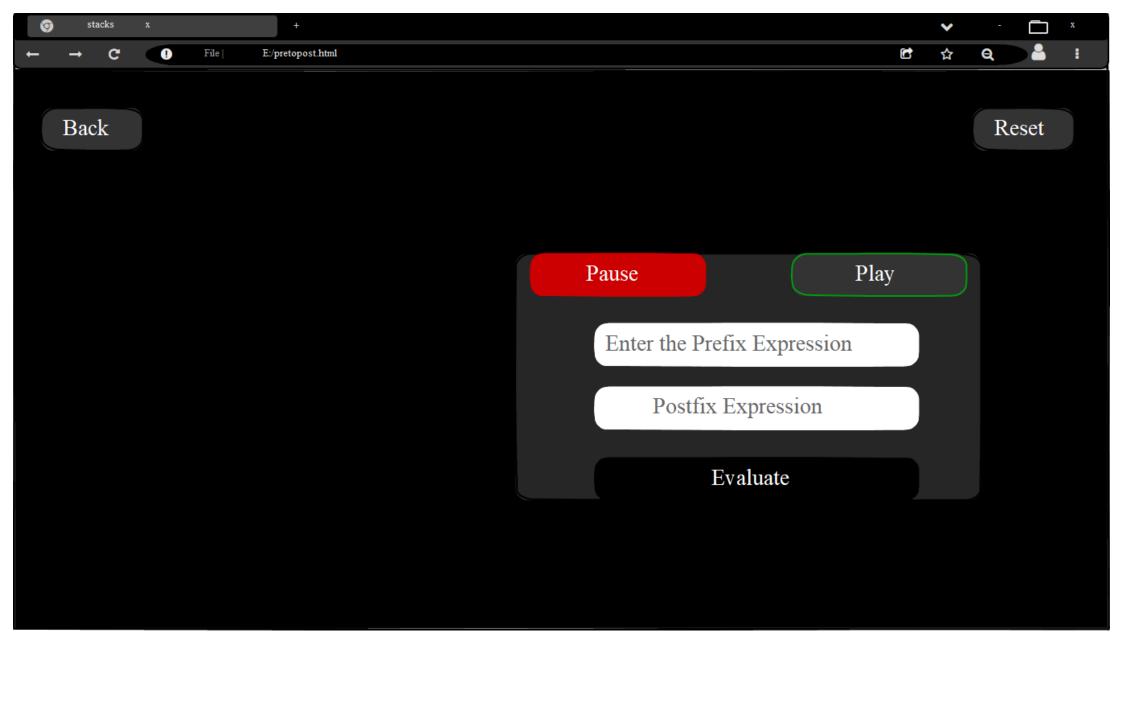


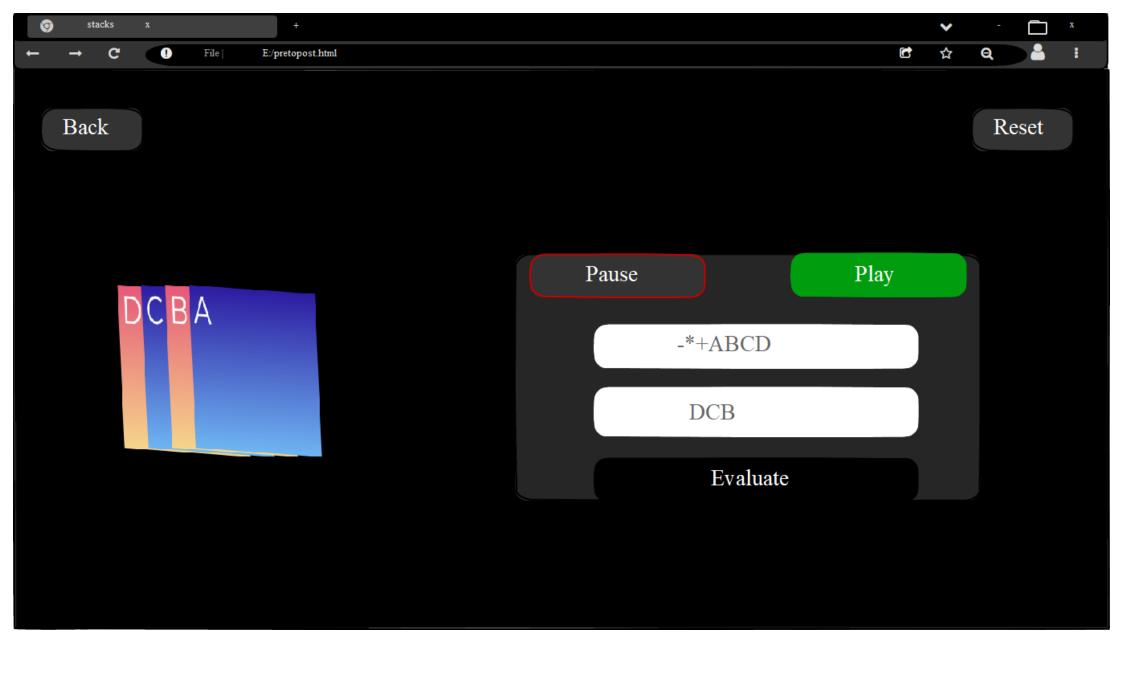


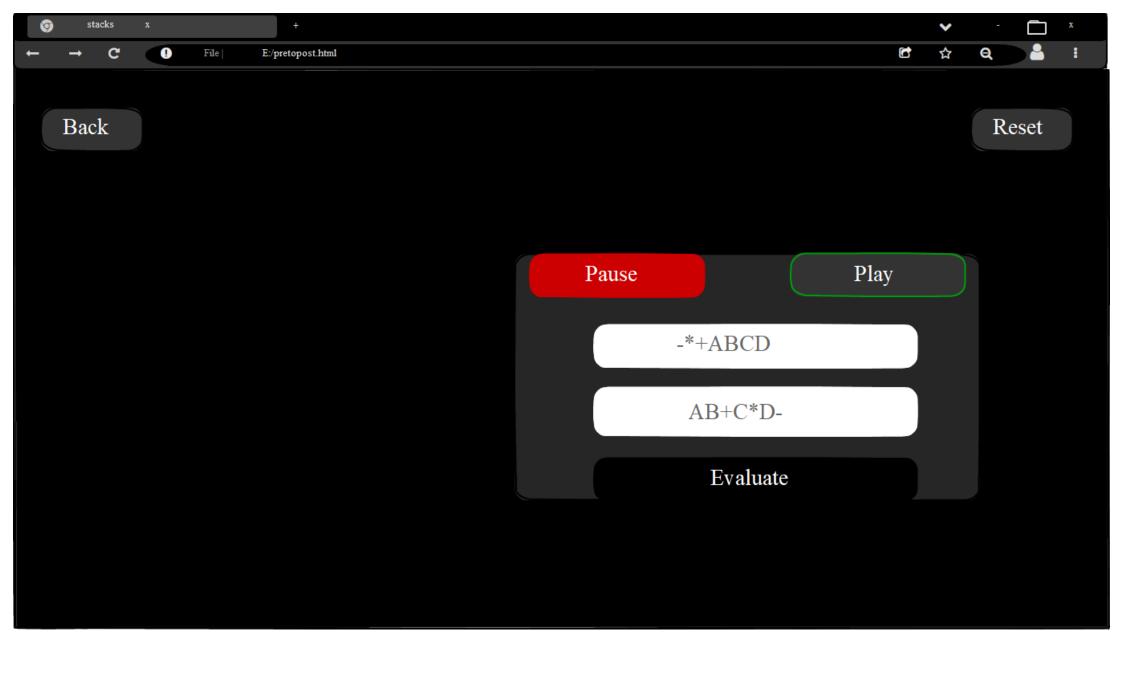


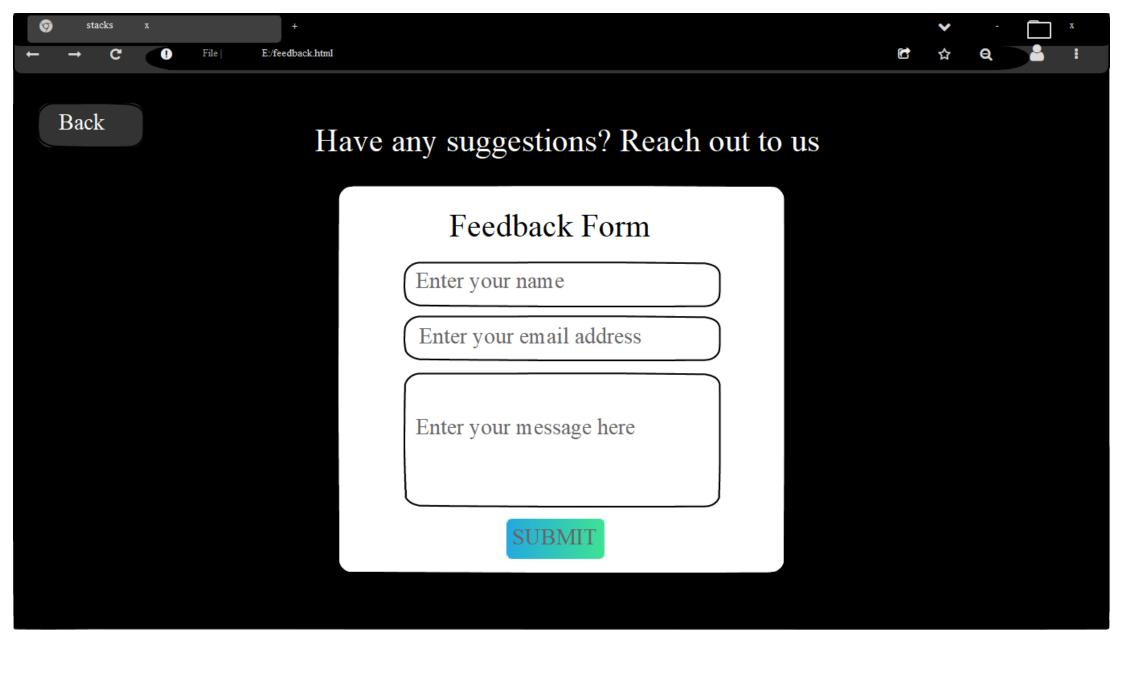














stacks

About Us

TEAM LEAD

Name: Karthik Sarode S R N: PES1PG21CA030 Backend development, .

" If life is full of stress. You go on a RIDE! "

FRONTEND DEVELOPER

Name: M. Sasikumar SRN: PES1PG21CA038

Fontend development, perfectionist in creating fronend animations and designs.

" Start doing what you love and you are unstoppable! "

DATABASE MANAGEMENT

Name: Narayana P

SRN: PES1PG21CA048

Backend development, can adapt to highly collaborative work environment.

" Starve your distractions feed your focus! "

FRONTEND DEVELOPER

Name: Karthik R Bhat S R N: PES1PG21CA031

STACK REPRESENTATION

A stack is an Abstract Data Type (ADT), commonly used in most programming languages. It is named stack as it behaves like a real-world stack, for example - a deck of cards or a pile of plates, etc.

Stack operations may involve initializing the stack, using it and then deinitializing it. Apart from these basic stuffs, a stack is used for the following two primary operations —

ALGORITHM FOR PUSH AND POP OPERATION

Step 1:Start

Step 2: If Top=Max-1

Print "Overflow: Stack is full" and Exit

INFIX AND POSTFIX EXPRESSION

When the operator is written in between the operands, then it is known as infix notation. Operand does not have to be always a constant or a variable; it can also be an expression itself.

For example, -(p+q)*(r+s)

The postfix expression is an expression in which the operator is written after

ALGORITHM FOR INFIX TO POSTFIX EXPRESSION

Let, X is an arithmetic expression written in infix notation. This algorithm finds the equivalent postfix expression Y.

Step 1: Start



INFIX EXPRESSION AND PREFIX EXPRESSION

Infix expression:

$$(p+q)*(r+s)$$

Syntax of infix notation is given below:

< operand > < operator > < operand >

Prefix expression:

• +na +re

ALGORITHM FOR INFIX TO PREFIX EXPRESSION

Iterate the given expression from left to right, one character at a time

Step 1: Start

Step 2: First reverse the given expression

PREFIX EXPRESSION, POSTFIX EXPRESSION

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ALGORITHM FOR PREFIX TO POSTFIX EXPRESSION

Let, Q be the arithematic expression written in prefix notation. P is the postfix notation.

Step 1: Start