IMAGE PROCESSING USING WEBASSEMBLY

A PROJECT REPORT

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DECLARATION

We hereby declare that the work entitled "**IMAGE PROCESSING USING WEBASSEMBLY**", submitted for the B. Tech. (CSE) degree is our original work and the project has not formed the basis for the award of any other degree, diploma, fellowship or any other similar titles.

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CERTIFICATE

This is to certify that the project titled "**IMAGE PROCESSING USING WEBASSEMBLY**" is the bonafide work carried out by **Mayank Singh Tomar, Himanshu Tiwari** and **Chirag Jain**, a student of B Tech (CSE) of Jaypee University of Engineering and Technology, Guna (M.P) during the academic year 2022-23, in partial fulfillment of the requirements for the award of the degree of Bachelor of Technology (Computer Science and Engineering) and that the project has not formed the basis for the award previously of any other degree, diploma, fellowship or any other similar tile.

Signature of the Guide

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ABSTRACT

This is a web based Image Processing web app which runs on the principle of *WebAsssembly.*Its main functionalities include applying proper transformation on the image. The user is given with option of selecting the way to add image via camera, computer or check functionalities on default images.

WebAssembly or *Wasm* defines as a portable binary-code format and a corresponding text format for executable programs as well as software interfaces for facilitating interactions between such programs and their host environment; i.e. *Wasm* enables high performance application on web pages. Therefore, it provides apps with high optimistic rate and better control over the content, helping the app in reaching best performance. Due to easy comptabl nature of webassembly our app works on various cross platforms enabling users for best possible experience. While providing with various tools at high speed while maintaining users data security. We designed our app in such a manner that it is an easy to read project making it highly modifiable. The current version of the app only include basic functionalities like crop, rotate scale and blur effect, etc. and have accessibility to add other features in the future like cartoonify, color change, etc. making our app highly customizable.

This is app made keeping various conditions in mind and is only possible with the help and support of various open source organizations, W3Schools, and other article providing platforms.

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Thanking you

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