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| Dhafin Fawwaz Ikramullah  Software Engineer | Game Developer  Work Experience – Every Paid Work Experiences.   * Memento - [2025]   Freelance Software Engineer for a Photobooth App with Video Editing feature, Payment Gateway, Printer & Camera integration, with Website, Backend Server & Database, and Gmail Notification.   * Programing Lab Asistant ITB - [2024]   Programming laboratorium Asistant for ITB.   * Rolling Glory Jam - [2024]   Internship Software Engineer for kinect (Computer Vision), shader creation, with Unity Engine & PhaserJs.   * Dewi Sri - [2024]   Freelance programmer for a storybook game.   * Kinnaria - [2024]   Freelance programmer for a rythm game.   * Kirana dan Laplip - [2023]   Freelance programmer for a storybook game.   * Legend of Tampoemas Mountain - [2022]   Freelance programmer for a storybook game.   * Flavy - [2021]   Freelance programmer for a visual novel game.  Skills – Framework/Library/Tools I’ve used and good at   * Game Development   Unity Engine, C#, HLSL/ShaderLab, PixiJs, PhaserJS.   * Web Development   NextJs, Django, Fiber, SvelteKit, ReactJs, Tailwind, Flask, D3, ExpressJs, Vite, SQLite, MySQL, PostgreSQL, MongoDB, Redis, NodeJs, ThreeJs, Socket.io, k6, PHP, Docker, HonoJs, Storyblok, Vercel, Supabase, OpenAPI/Swagger/Scalar.   * Mobile Development   Flutter, Dart, Firebase, React Native, Unity.   * Desktop Development   Tauri, Rust, .NET, Unity, FFMPEG, Qt, Unity, Python, Java.   * Operating System Development   C, Assembly, Qemu, Linux, Virtual Box.  Volunteer Works – My volunteer works   * Speaker for GIM Apprenticeship 2024 Day 0   Talk about Game Development and its career.   * Speaker for SPARTA HMIF   Talk about Game Development and its career.   * Introduction to Computer Science Tutor GAMAIS   Tutor for exam for a another Organization.   * Web Based Development Tutor HMIF   Tutor for exam in Student Association in my major. | Contact/More Info  Website: [https://dhafinfawwaz.com](https://dhafinfawwaz.com/)  Github: <https://github.com/DhafinFawwaz>  Linkedin <https://linkedin.com/in/dhafinfawwaz/>  Whatsapp: [+628116292109](https://wa.me/628116292109/?text=)  Gmail: [dhafin.fawwaz@gmail.‌com](https://mail.google.com/mail/?view=cm&fs=1&tf=1&to=dhafin.fawwaz@gmail.com)  Instagram: [@dhafin\_fawwaz](https://www.instagram.com/dhafin_fawwaz)  Discord: [kitkatmt](https://discordapp.com/channels/@me/kitkatmt)  Education – The Education I’ve pursued   * Bandung Institute of Technology (ITB)   Informatics | 6th Semester | Current GPA 3.77/4.00.  Achievement/Awards – Big Achievement in my Journey   * 1st Winner Gemastik XVII - [2024]   National level Game Development Competition issued by The Ministry of Education and Technology.   * Ganesha Award (Ganesha Karya) - [2024]   National level Game Development Competition issued by The Ministry of Education and Technology.   * Finalist IT Fest 2024 - [2024]   National level Software Development Competition issued by Padjajaran University.   * Finalist Gemastik XVI - [2023]   National level Game Development Competition issued by The Ministry of Education and Technology.   * 2 Category Winner GIM Jam 2023 - [2023]   National level Game Dev Competition by GIM ITB.   * 2nd Winner of Game Dev MAGE 7 - [2021]   National level Game Development Competition issued by Sepuluh Nopember Institute of Technology.   * Finalist of Kompetisi Sains Nasional - [2021]   Top 100 Natianal level Finalist of an official Computer Science Olympiad by The Ministry of Education.  Organization – Activities througout my journey   * Head of Programming at GIM ITB   Lead GIM Website Development, share programming knowlede for an organization about gamedev in ITB.   * Treasurer at GIM Jam 2025   Manage Finance & do External Relation work to contact and coordinate the speaker for the awarding event.   * Head of GameDev Committee at Pra-Gemastik ITB   Selection of ITB representatif for Gemastik with Himpunan Mahasiswa Teknik Informatika (HMIF).   * Vice Head of Research & Development at GIM   Share research, competition, and manage team project for An organization about game development in ITB.   * Head of New Member Admission at GIM ITB   6 months process of new member selection for GIM Apprenticeship 2023. |
| Favorite Technical Projects – Some of my Favorite projects. More info at <https://dhafinfawwaz.com/#project>. | |
| * [AnimationUI](https://github.com/DhafinFawwaz/Unity-AnimationUI) - [Unity Engine, C#]   Open source Motion/Tweening Tool/Library with Visual Editor for Unity Engine, +400 stars on Github.   * [Pace Break](https://kitkatmt.itch.io/pacebreak) - [Unity Engine, C#, HLSL]   Fast platformer combat, Hollow Knight inspired Game, with observer, state machine, Shader based VFX, etc.   * [Bezier Curve Gen](https://beziercurvegenerator.vercel.app/)erator - [PixiJs, Vercel, Tailwind]   Interactive Visualized & Animated Bezier Curve Generator Website with DnC & Brute Force Algorithm.   * [Film Store - [Django, Docker, Tailwind, Playwright, Javascript]](https://dhafinfawwaz.com/project/film-store/)   Ecommerce website about buying film with caching, database, polling, automated End to End testing, etc..   * GIM Website - [NextJs, Storyblok CMS, OpenAPI]   Lead Software Engineer for an Organization Website, integrated with my Custom Open API Library for NextJs, Storyblok CMS, Database, Prisma ORM, etc. | * [Memento - [Tauri, Rust, Next.js, FFMPEG, Supabase, Vercel]](https://dhafinfawwaz.com/project/memento/)   Photobooth Desktop App with video editing, Payment Gateway, Printer & Camera integration, with Website, Backend Server & Database, and Gmail Notification.   * [SiAbsen](https://dhafinfawwaz.github.io/project/siabsen) - [Inngest API, NextJs, ExpressJs, Vercel, PostgreSQL]   Notification bot website for student attendance presence with Scheduler, Cron Job, Authentication.   * [Ocular](https://dhafinfawwaz.github.io/project/ocular) - [NextJs, Django, C, SQLite]   Content-based Image Retrieval with web scrapping, multiprocessing, backend server, and database.   * [Linkinpurry Social - [Socket.io, Hono, Vite, React, Swagger]](https://dhafinfawwaz.com/project/linkinpurry-social/)   Social Media Website with realtime chat, database, k6 load test, OpenAPI docs with Swagger, etc.   * [Magic Cube Solver - [ThreeJs, Vite, Tailwind]](https://dhafinfawwaz.com/project/magic-cube-solver/)   AI Algorithm like Genetic, Simulated Annealing, Stochastic Hill Climbing, etc. with 3D Animated Visualization. |
| Grouped Technical Projects | |
| Visualized Solvers with Website/Desktop App   * [Wikirace Solver - [PixiJs, Go, Fiber]](https://dhafinfawwaz.com/project/wikirace-solver/)   Wikirace solver with nodes visualization with webscrapping & multithreading using Breadth First Search Algorithm and Iterative Deepening Search Algorithm.   * [Breach Protocol Solver - [C++, Qt]](https://dhafinfawwaz.com/project/breach-protocol-solver/)   Cyberpunk 2077 Breach Protocol solver and its Visualization implemented with Brute Force algorithm.   * [Plagiarism Checker - [Next.js, React]](https://dhafinfawwaz.com/project/plagiarism-checker)   Plagiarism Checker for large amount of research paper with W-Shingling, N-Grams, KMP, and BM algorithm.   * [Linear Equation System Matrix - [Java]](https://dhafinfawwaz.com/project/linear-equation-system-matrix/)   Java Swing Desktop App to implement Linear Equation System such as Gauss-Jordan Elimination, Cramer’s Rule, Multiple Linear Regression, Polynomial Interpolation, Image Enlargement Interpolatuion.  Unity Custom Library/Package/Tools   * [VFX Mesh Generator - [Unity Engine, C#]](https://dhafinfawwaz.com/project/vfx-mesh-generator/)   3D Mesh Generator for VFX creation with shader.   * [Reusable FSM with Editor](https://dhafinfawwaz.com/project/reusable-finite-state-machine-with-editor) - [Unity Engine, C#]   Implementation of Finite State Machine pattern but reusable in Unity including a visual editor.   * [HitBox System with Editor - [Unity Engine, C#]](https://dhafinfawwaz.com/project/hitbox-system-with-editor/)   Flexible Hitbox system with visualization and easy edit integrated with the builtin animation system.   * [Very Optimized Coins Shader - [Unity Engine, HLSL]](https://dhafinfawwaz.com/project/very-optimized-coins-shader/)   Thousands of coins with variated jump phase, flipbook animation, jump height, etc. rendered in only 1 batch.  Mobile Development   * [Expiration Reminder - [Flutter, OpenAI API, MongoDB]](https://dhafinfawwaz.com/project/expiration-reminder/)   Reminder Mobile app with QR Code integrated with OpenAI API for auto-generated description.  Desktop Development   * [Le Mari](https://dhafinfawwaz.com/project/le-mari/) - [Python, Flet, SQLite]   Desktop App to Manage Outfits with tagging system.   * [Farmer Rancher Mayor Simulator - [C++, Qt]](https://dhafinfawwaz.com/project/farmer-rancher-mayor-simulator/)   Desktop App to simulate farmer, rancer, and mayor.  Web Development   * [Auth Template](https://dhafinfawwaz.com/project/auth-with-many-frameworks/) - [NextJs, Django, Express, Go,Fiber, Laravel]   Auth implementation with various frameworks.   * [Ecommerce Book - [Django, Javascript, SQLite, Boorstrap]](https://dhafinfawwaz.com/project/ecommerce-book/)   Ecommerce website for buying books with SQLite Database, with boothstrap for styling.   * [Linkinpurry Jobs - [PHP, Javascript, Docker, Apache]](https://dhafinfawwaz.com/project/linkinpurry-jobs/)   Linkedin copy Website with file upload, connection request sytem, authentication, etc.   * [RangkiangForm - [Spreadsheet API, ReactJs, ExpressJs]](https://dhafinfawwaz.com/project/rangkiang-form/)   Form with spreadsheet API for Coffee Company. | OS Development   * [OsLahPokoknya](https://dhafinfawwaz.com/project/oslahpokoknya) - [C, Assembly, Qemu]   Operating System written in C & Assembly with File System, Shell, Multiprocessing, Context switch, etc.   * [TCP Over UDP - [C++. Linux, Virtual Box]](https://dhafinfawwaz.com/project/tcp-over-udp/)   TCP implemented over UDP with Sliding Wind, Checksum algorithm, Retries, and Multiplexing.  Game Development   * [Financial Streams - [Unity Engine, C#, HLSL]](https://dhafinfawwaz.com/project/financial-streams/)   Management, Finansial Lieteracy, Streamer Simulation, RPG game winning 1st place in Gemastik XVII 2024.   * [Functional Defense - [Unity Engine, C#, HLSL, Blender]](https://dhafinfawwaz.com/project/functional-defense/)   Gamification of Math function/curve. Gemastik XVI Finalist.   * [HexaTap](https://hexatap-47a94.web.app/) - [Javascript, PixiJs, Firebase]   A fun and fast paced tapping web game.   * [Leapy Leapy Fishy](https://www.youtube.com/watch?v=M86PU0PGgaM) - [Unity Engine, C#]   3D Game, Won 2nd place in Game Development competition issued by Sepuluh Nopember Institute of Technology.   * [VFX-Shader Collection - [Unity Engine, C#, HLSL]](https://dhafinfawwaz.com/project/vfx-shader-collection/)   3D Game, Won 2nd place in Game Development competition issued by Sepuluh Nopember Institute of Technology.   * [Project Arthur - [Unity Engine, C#, HLSL, Blender]](https://dhafinfawwaz.com/project/project-arthur/)   Hack & slash, Rougelike top down game implementing state machine, observer, object pooling, etc.   * [Grappler Crashers - [Unity Engine, C#, HLSL]](https://dhafinfawwaz.com/project/grappler-crashers/)   Unique hypercasual game with creative mechanic and physics. Implemented pattern like state machine, singleton, etc. It wins 1st place on internal GIM event.   * [Cube Associator - [Unity Engine, C#, HLSL]](https://dhafinfawwaz.com/project/cube-associator/)   Chaotic merging game for submission in GMTK Game Jam.   * [Clustered Chaos - [Unity Engine, C#, HLSL]](https://dhafinfawwaz.com/project/clustered-chaos/)   Creative game winning 2 category on GIM Jam 2023.   * [Flavy - [Unity Engine, C#, HLSL]](https://dhafinfawwaz.com/project/flavy/)   A visual novel game to introduce the campus branch of Bandung Institute of Technology.   * [Legend of Tampoemas Mountain - [Unity Engine, C#]](https://dhafinfawwaz.com/project/legenda-gunung-tampomas/)   Story book game about the Tampoemas Mountain.   * [Kirana & Laplip - [Unity Engine, C#]](https://dhafinfawwaz.com/project/kirana-dan-laplip/)   Story book game about Kirana & Laplip.   * [Dewi Sri - [Unity Engine, C#, HLSL]](https://dhafinfawwaz.com/project/dewi-sri/)   Story book game about Dewi Sri.   * [Kinnaria - [Unity Engine, C#, HLSL]](https://dhafinfawwaz.com/project/kinnaria/)   Rythm game telling about story of Kinnaria.   * [Snake 4D - [Unity Engine, C#, HLSL]](https://dhafinfawwaz.com/project/snake-4d/)   4D Snake game getting +5000 installswhen i’m a beginner.  Summary  Software Engineer, Indie Game Developer for fun, a particle vfx & shader enthusiast, and a math enjoyer.  Current main specialities are Web, Game, and Backend Development  Published a game with [+5000 installs](https://play.google.com/store/apps/details?id=com.sppAghetti.Snake4D&hl=en&gl=US)  Wrote a library/tool with +400 stars on Github  1st place GEMASTIK GameDev XVII  Worked inside and led teams on multiple projects. |