

**VIETNAM NATIONAL UNIVERSITY – HO CHI MINH CITY
INTERNATIONAL UNIVERSITY
SCHOOL OF COMPUTER SCIENCE AND ENGINEERING**



**WEB APPLICATION DEVELOPMENT
IT093IU
ASSIGNMENT 1**

Member List:

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I. PROJECT OVERVIEW

- This project is a personal portfolio website designed to showcase professional experience, education, skills, hobbies, and services in a clean, responsive, and user-friendly manner. The website contains multiple connected pages, consistent design language, and a responsive layout suitable for both desktop and mobile users.
- The site is implemented using:
 - HTML5 for structure
 - CSS3 for design and responsiveness
 - Font Awesome for icons
 - Google Fonts for typography
 - AOS (Animate on Scroll) for scroll-based animations
- The project fulfills the key web development requirements including accessibility, proper validation, responsive design, working navigation, and deployment readiness.

II. HTML STRUCTURE AND PAGES

- The website consists of seven main HTML pages:
 - index.html – Home page
 - cv.html – Curriculum Vitae / Experience
 - education.html – Education background
 - skills.html – Technical and soft skills
 - hobbies.html – Personal interests and hobbies
 - services.html – Professional services offered
 - contact.html – Contact form and social links
- Each page follows the same header and footer structure for consistency.
- Having separate HTML pages improves content organization, page focus, and search engine optimization (SEO). Users can navigate logically between sections without scrolling through a single long page. This helps ensuring user-friendliness, giving user the choice to visit and view sites that they want to.
- Each page uses a consistent <header> tag with a navigation bar linking all other pages, and a <footer> section with copyright and social links.
- Example from index.html:

```

<div class="nav-container">
  <header>
    <a href="index.html" class="logo"><span>Natsuki</span></a>

    <nav>
      <a href="index.html" class="active"> Home</a>
      <a href="services.html"> Sevices</a>
      <a href="skills.html"> Skills</a>
      <a href="education.html"> Education</a>
      <a href="hobbies.html"> Hobbies</a>
      <a href="contact.html"> Contact</a>
    </nav>
  </header>
</div>

```

```

69     <footer>
70       <div class="text">
71         <span>Created by
72           <a href="https://github.com/nxtsukii">nxtsukii</a>
73           | &#169; 2025 All Rights Reserved</span>
74       </div>
75     </footer>
76

```

- By using this structure, it can make sure that the menu remains consistent across all pages.

III. NAVIGATION SYSTEM

- What is used
 - A single navigation bar (<nav>)
 - CSS hover effects for active states
- Consistent navigation enhances usability, user retention and accessibility. It allows users to easily find related content without having to go through the troubles of scrolling through unnecessary contents.
- Examples:

```

<div class="nav-container">
  <header>
    <a href="index.html" class="logo"><span>Natsuki</span></a>

    <nav>
      <a href="index.html"> Home</a>
      <a href="services.html"> Sevices</a>
      <a href="skills.html"> Skills</a>
      <a href="education.html" class="active"> Education</a>
      <a href="hobbies.html"> Hobbies</a>
      <a href="contact.html"> Contact</a>
    </nav>
  </header>
</div>

```

```

<div class="nav-container">
  <header>
    <a href="index.html" class="logo"><span>Natsuki</span></a>

    <nav>
      <a href="index.html"> Home</a>
      <a href="services.html"> Sevices</a>
      <a href="skills.html"> Skills</a>
      <a href="education.html"> Education</a>
      <a href="hobbies.html"> Hobbies</a>
      <a href="contact.html" class="active"> Contact</a>
    </nav>

```

- Each pages is implemented the same navigation bar, only difference is the 'class="active"' embedded in the a href brackets to show which page is currently active, which is better shown using CSS:

```

67   nav a:hover,
68   ▼ nav a.active{
69     color: ■ #b74b4b;
70     text-shadow: 0 0 10px ■ #b74b4b;
71     border-bottom: 3px solid ■ #b74b4b;
72   }
73

```

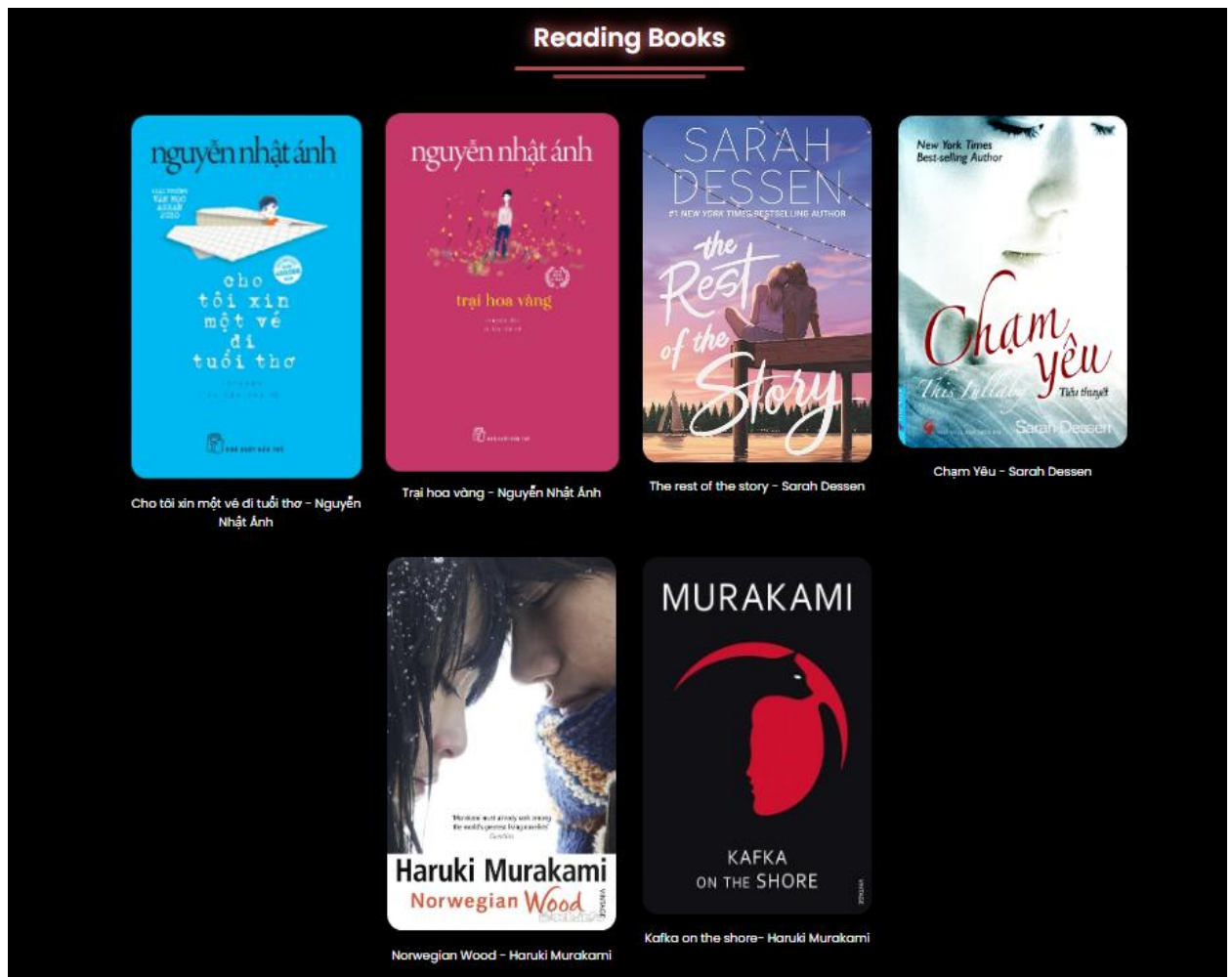
IV. IMAGES AND MULTIMEDIA

- What is used
 - At least five images stored under /assets/images/
 - One iframe (for embedded Google Map or video)
 - 'alt attributes' for all elements

- Images add visual identity and help visitors understand personality and achievements. The alt attributes ensure accessibility compliance and help screen readers describe images. And iframe allows embedding dynamic content such as a location map or showcase video. These altogether help brightening the website and bring more “liveliness” to by adding more visual contents rather than just texts.

- Example from hobbies.html:

```
<main class="hobbies-container">
  <section class="reading-section">
    <h2>Reading Books</h2>
    <div class="book-carousel">
      <div class="book-item">
        
        <p>Cho tôi xin một vé đi tuổi thơ - Nguyễn Nhật Ánh</p>
      </div>
      <div class="book-item">
        
        <p>Trại hoa vàng - Nguyễn Nhật Ánh</p>
      </div>
      <div class="book-item">
        
        <p>The rest of the story - Sarah Dessen</p>
      </div>
      <div class="book-item">
        
        <p>Chạm Yêu - Sarah Dessen</p>
      </div>
      <div class="book-item">
        
        <p>Norwegian Wood - Haruki Murakami</p>
      </div>
      <div class="book-item">
```



- The “Gaming” section especially, implementing iframe, which is supported with javascript:

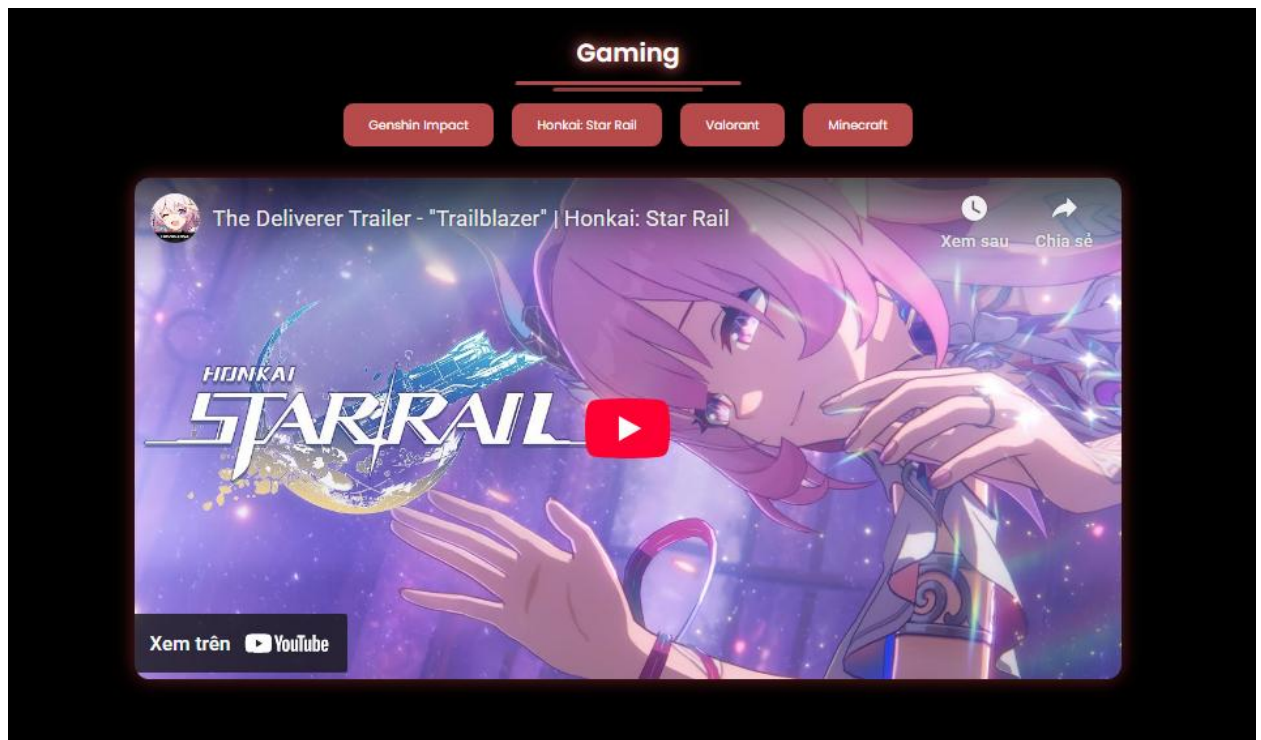
```
<section class="gaming-section">
  <h2>Gaming</h2>
  <div class="game-list">
    <button class="game-btn" onclick="showVideo('genshin')">Genshin Impact</button>
    <button class="game-btn" onclick="showVideo('hsr')">Honkai: Star Rail</button>
    <button class="game-btn" onclick="showVideo('valorant')">Valorant</button>
    <button class="game-btn" onclick="showVideo('minecraft')">Minecraft</button>
  </div>

  <div class="game-video">
    <iframe id="gameVideoFrame" src="" frameborder="0" allowfullscreen></iframe>
  </div>
</section>
```

```

<script>
  function showVideo(game) {
    const frame = document.getElementById("gameVideoFrame");
    if (game === "genshin") {
      frame.src = "https://www.youtube.com/embed/w50jW_iEXns";
    } else if (game === "hsr") {
      frame.src = "https://www.youtube.com/embed/VJ6XyhwuaMc";
    } else if (game === "valorant") {
      frame.src = "https://www.youtube.com/embed/jAj_nbWYb7g";
    } else if (game === "minecraft") {
      frame.src = "https://www.youtube.com/embed/5qjnDd1rsII";
    }
  }
</script>

```



V. CONTACT FORM AND INPUT VALIDATION

- What is used

- A full HTML form with multiple input types:
- text, email, tel, textarea, and submit
- Basic HTML validation (required attributes)
- Semantic form tags (<form>, <label>, <input>, <textarea>)

- A contact form provides direct communication with potential clients or collaborators. And HTML5 built-in validation ensures correct data input without requiring JavaScript.
- Examples from contact.html:

```
<form id="contactForm" novalidate>
  <fieldset>
    <legend>Personal Information</legend>

    <label for="fullname">Full Name:</label>
    <input type="text" id="fullname" name="fullname" required pattern="^[A-Za-z ]+$">
    <span class="error" id="nameError"></span>

    <label for="email">Email:</label>
    <input type="email" id="email" name="email" required>
    <span class="error" id="emailError"></span>

    <label for="phone">Phone:</label>
    <input type="tel" id="phone" name="phone" required pattern="^[0-9]{10,11}$">
    <span class="error" id="phoneError"></span>

    <label for="age">Age:</label>
    <input type="number" id="age" name="age" min="10" max="120" step="1" required>
  </fieldset>
```

The image shows a dark-themed web interface. At the top, there is a link that says "Or send me a message" in red text. Below this is a rounded rectangular box with a red border and the title "Personal Information" in red. Inside this box, there are four input fields, each with a label to its left: "Full Name:", "Email:", "Phone:", and "Age:". The input fields are dark gray and currently empty.

VI. CSS STYLING AND RESPONSIVE LAYOUT

- What is used
 - External stylesheet (style.css)
 - Flexbox for layout alignment
 - Media queries for responsiveness
 - Google Fonts for typography

- Font Awesome for icons
- An external CSS file ensures consistency and maintainability across all pages. With flexbox simplifying responsive alignment, and font Awesome provides scalable icons that load quickly and look sharp on all devices.
- Examples:

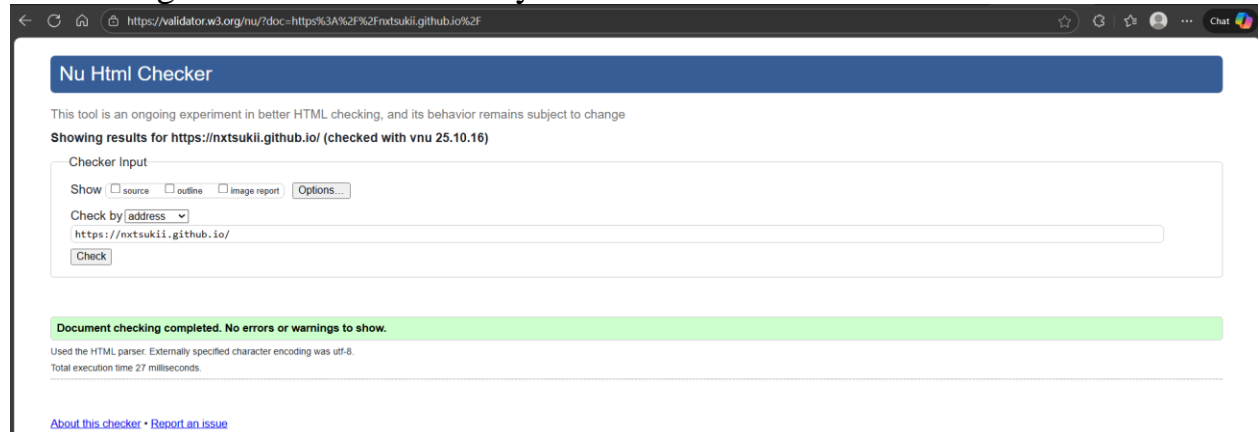
```
*{  
  margin: 0;  
  padding: 0;  
  box-sizing: border-box;  
  text-decoration: none;  
  border: none;  
  outline: none;  
  font-family: 'Poppins', sans-serif;  
}
```

```
▼ @media(max-width:995px){  
▼   nav{  
     position: absolute;  
     display: none; /*New fix*/  
     top: 0; /*Old value: 100%*/  
     right: 0;  
     width: 40%;  
     border-left: 3px solid #b74b4b;  
     border-bottom: 3px solid #b74b4b;  
     border-bottom-left-radius: 2rem;  
     padding: 1rem solid;  
     background-color: #161616;  
     border-top: 0.1rem solid rgba(0,0,0,0.1);  
   }  
}
```

VII. ACCESSIBILITY AND VALIDATION

- What is Used

- alt attributes for images
- Semantic HTML (<header>, <nav>, <main>, <footer>)
- Proper <label> tags for all form inputs
- HTML5 validation attributes (required, type="email", etc.)
- Accessibility and validation improve usability for all users, including those using assistive technologies, and ensure compliance with web standards.
- All pages were checked and passed the W3C HTML and CSS Validators, confirming correct structure and syntax.



VIII. DEPLOYMENT

- What is used
 - GitHub Pages for hosting
 - Project repository: nxtsukii.github.io
 - Public URL: <https://nxtsukii.github.io/>
- GitHub pages provides free hosting with automatic version control and integration with the project's GitHub repository.
- How it is used: The site files were pushed to the repository's main branch, and the repository was configured in GitHub Pages settings to publish from that branch. Thus, deploying a website with the link {username}.github.io

IX. AI USAGE LOG

AI tools was implemented in helping with certain tasks:

- Generating website ideas for layouts and initial structure.
- Correcting code logic and simplifying for optimization.
- Searching out sources for public libraries.

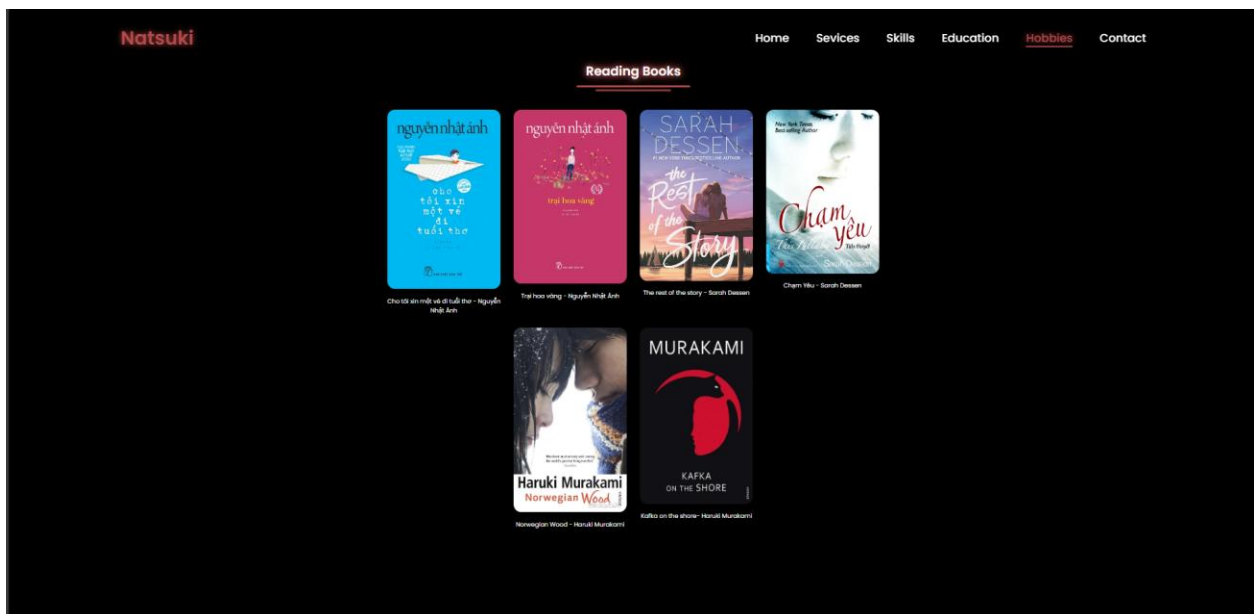
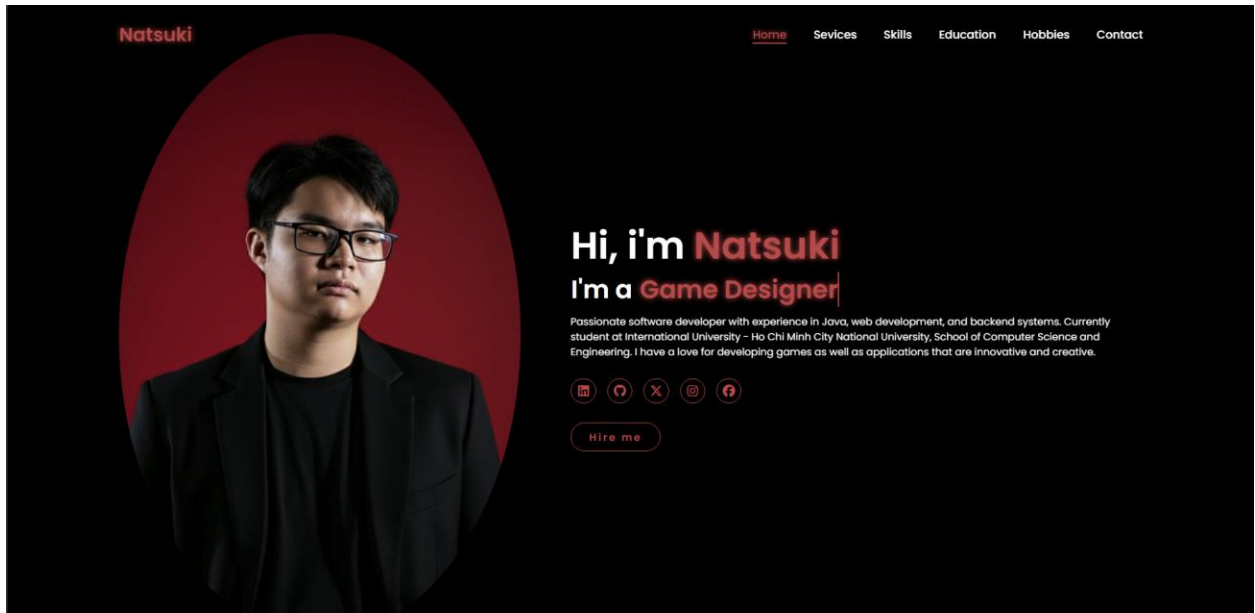
X. OUTSOURCE MATERIALS

<https://cdnjs.cloudflare.com/ajax/libs/font-awesome/6.5.2/css/all.min.css>

<https://fonts.googleapis.com/css2?family=Poppins%3Awght%40100%3B200%3B300%3B400%3B500%3B600&display=swap%27%29%3B>

<https://github.com/michalsnik/aos>

XI. FINAL OUTPUT



Gaming

[Genshin Impact](#)[Honkai Star Rail](#)[Valorant](#)[Minecraft](#)

Education Status



Graduated High School - Nam Hà High School

Attended High School at Nam Hà High School 2020-2023. Graduated with excellent grades and an award in the "Provincial English proficiency exam", having got 2nd place prize. Was an ex-member of NamHà720 Entertainment Club, specialized in media and entertainment.



Bachelor of Information Technology - International University - HCM City National University

Started attending University at International University - HCM City National University on August, 2023. A student of School of Computer Science and Engineering and a student of the course for the international education program in collaboration with University of West of England (4 + 0 program) in Information Technology field.

Natsuki
Or send me a message
Home
Services
Skills
Education
Hobbies
Contact

Personal Information

Full Name:

Email:

Phone:

Age:

Other Details

Preferred Contact Date:
mm/dd/yyyy

Notification (s-h):

Profile Color:

Upload File:
Choose File No file chosen

Contact Preference:
☒ Email ☐ Phone

☒ Subscribe to newsletter

Country:
Vietnam

Message:

Profile Bio:

Submit
Reset

Natsuki
Home
Services
Skills
Education
Hobbies
Contact

My Services

Game Development

Main specialized service, interested in any kind of game development!

Web Development

Experienced in web application development. Have worked on multiple websites in and out of studies.

Graphic Design

Specialized in Computer Graphics, specifically applied to game developments.

Design and Analysis

Experienced in analyzing customer requests and can design suitable and optimal design for projects.

Apps Development

Can work on mobile applications as well as desktop applications.

Social Media Work

Experienced in social media work. Have worked in entertainment and media fields.

My Skills

Skill reflects knowledge

Attended School of Computer Science and Engineering at International University - Ho Chi Minh City National University for 4 years. I have also worked with earlier EZ Games Studio on 3 game projects and tested 6 products during my 10 months working for them. During my time enrolling at University I have also worked as a free-lance developer and have worked on several web projects and games.

10 Years Of Experience

Java

90%

HTML

70%

Javascript

80%

SQL

60%

People i have colaborated with



Đặng Thanh Lâm



Nguyễn Hoàng Minh Duy



Phạm Vũ Hải Đăng



Trần Anh Khoa