



Stand Out Online Portofolio Design with Flowbite for Beginners

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ABSTRACT

This community engagement project aimed to enhance digital literacy by providing practical training on building online portfolios using Flowbite and Tailwind CSS. The initiative targeted students and beginners who lacked prior experience in creating web-based portfolios. Through a combination of webinars and hands-on workshops, participants were introduced to the fundamentals of

portfolio design, User-Centered Design (UCD) principles, and modern UI development using Flowbite components. The project implemented a project-based learning approach to ensure both theoretical understanding and technical skills acquisition. The event was held virtually on July 14, 2025, and attended by 33 participants, with 21 actively engaged during the session. A pre-test and post-test were administered to evaluate learning outcomes. The results showed a significant improvement in participants' understanding, with the average score increasing from 73.5 to 87. Additionally, 95% of participants expressed satisfaction with the training format and content. The program successfully equipped participants with the necessary knowledge and skills to develop responsive and aesthetically pleasing online portfolios, contributing to their personal branding efforts in the digital era.

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A. INTRODUCTION

The rapid development of digital technology has encouraged individuals to establish their online identity, one of which is through the creation of a portfolio website. A digital portfolio that is designed to be attractive, functional, and easily accessible provides added value in attracting potential clients while reflecting a level of professionalism (Akbar Hudhayana & Ady Saputro, 2025). Although showcasing one's work is important, it is not enough. User comfort while navigating the site is a key factor in ensuring information is



conveyed efficiently and visitors are encouraged to take actions such as contacting or using the services. For this reason, the User-Centered Design (UCD) approach is employed in the design process, as it enables designs that are fully oriented toward the needs, behaviors, and expectations of end-users (AL FISYAH, 2025).

In today's digital age, the ability to create a web portfolio is an important skill that supports personal branding, especially for students, college students, and professionals in the fields of technology and design (Melissa, 2024). A web portfolio is not only a place to showcase one's work, but also reflects one's identity, technical abilities, and visual aesthetics in the virtual world. One modern approach to web interface development is to utilize UI frameworks such as Flowbite, a Tailwind CSS component that facilitates the efficient creation of responsive and interactive designs (Azhariyah & Muhammad Mukhlis, 2024).

Many beginners find it tricky to build a digital portfolio since they don't have strong coding skills and styling everything with CSS can be a hassle. That's where Flowbite comes in – it offers ready-made components like buttons, cards, and navigation bars, making it easier to put together a clean, professional-looking portfolio without starting completely from scratch, flowbite provides a variety of ready-to-use interface components, such as buttons, cards, navigation, and forms, making it ideal for creating web portfolios that are quick to build yet remain aesthetically pleasing and functional. However, not all beginners understand how to utilize these modern tools. Therefore, structured basic training is needed to equip participants with the knowledge and skills to build portfolios directly (Flowbite & Szögyényi, 2025).

Training through webinars and workshops has proven to be an effective method as it integrates theoretical learning with hands-on practice. Webinars provide participants with the convenience of accessing materials online with flexible timing, while workshops emphasize practical experience that can enhance participants' technical skills. The combination of these two approaches is believed to strengthen participants' understanding and skills in designing web portfolios using Flowbite optimally (Fitriani et al., 2024).

B. METHODS

The solution offered in this program is hands-on training to address participants' limited understanding of creating modern, attractive, and functional web portfolios using the UI Flowbite framework. The target audience for this activity is students and university students who have no experience in independently building digital portfolios using Tailwind CSS and its components. The training is conducted in the form of webinars and online workshops to provide participants with systematic guidance in building web portfolios in a step-by-step and structured manner. The approach used in this activity is project-based learning combined with live demonstrations.

Webinars are used as a medium for introducing theoretical concepts, such as the basics of digital portfolios, the importance of User-Centered Design (UCD), and an understanding of the Flowbite framework as a UI tool based on Tailwind CSS. Meanwhile, workshop sessions focus on hands-on practice in creating web portfolios. In this session, participants are guided through technical steps, starting from creating a basic HTML structure, applying Flowbite components such as navigation, cards, and forms, to the final stage of testing the display to ensure it is responsive and appealing across various devices.



Location and Time

The webinar and workshop were held online through Zoom, so participants from different areas could easily join in. Both sessions took place on the same day – starting with the webinar in the morning, followed by the workshop later in the noon.

Participants (Number and Profile)

The program is mainly aimed at students who haven't had the chance to create their own digital portfolio before. Around 20 participants are expected to join, coming from different backgrounds such as IT, design, and other related fields.

Training Method

The training applies a *Project-Based Learning* approach mixed with live demos. In the webinar, participants get the theory and key concepts, while the workshop gives them a chance to dive in directly building their own web portfolios with Flowbite and Tailwind CSS.

Evaluation Instrument

The evaluation uses a couple of simple tools:

1. **Pre-test and post-test** to see how much participants' knowledge improves.
2. **Feedback form** to capture their thoughts on the material, the presenters, and how relevant the training feels.

Data analysis technique

For the analysis, a descriptive-comparative approach is applied:

1. Pre-test and post-test results are compared to track learning progress.
2. Feedback responses are summarized to gauge how effective the program was and how satisfied the participants felt.

With this approach, it is hoped that participants will not only understand the concept of web portfolio design, but also have technical skills that can be directly applied to their personal digital projects. The procedure for implementing the activity is as follows:

1. Stage 1 (Activity Socialization)
At this stage, the Service Team conducts socialization on social media by sharing flyers and registration links at the URL <https://docs.google.com/forms/d/e/1FAIpQLSfQtS3AuqMYdZsgbmb9Z2Nsi0vRFTNwtAjmb-UCD655zhtxw/viewform?usp=dialog> regarding the Webinar and Workshop activities. Posters were posted in WhatsApp group broadcast messages and shared via Instagram by each member.
2. Stage 2 (Activity Material Preparation)
In this stage, the team prepared the materials to be used in the webinar and workshop sessions, including portfolio introductions and flowcharts. The materials are created in presentation format (PPT) and will be presented directly by the presenter during the event.
3. Stage 3 (Participants Fill Out Pre-Test)



Before the event begins, participants are directed to fill out a pre-test at the URL <https://forms.gle/whU4XrWeAuzFjukE7>, which contains a number of questions related to the webinar and workshop materials. The purpose of this pre-test is to assess how well participants understand the topics to be discussed. The results of the pre-test will be compared with the post-test completed after the event concludes, to measure the improvement in participants' understanding throughout the series of events.

4. Stage 4 (Community Education Through Webinars)

The webinar sessions focused on providing theoretical material about the importance of digital portfolios in the professional world and the reasons for using Flowbite as a UI framework. Flowbite was chosen because it is compatible with Tailwind CSS, provides ready-to-use interface components, and is suitable for beginners. The webinar also introduces the tools used during the training, such as Visual Studio Code, Replit, and GitHub.

5. Stage 5 (Training Through Workshops)

After the theoretical session, participants attend interactive workshops. In this session, participants are guided directly to create a simple web portfolio using Tailwind CSS and components from Flowbite. Practice is done in stages, starting from basic HTML structure, Tailwind CSS integration, to the use of Flowbite elements such as buttons, navbars, and forms.

6. Stage 6 (Feedback and Post-Test by Participants)

At the end of the activity, participants are asked to fill out a form as a form of feedback to determine how satisfied they are with the presentation of the material by the presenters. Additionally, participants are also asked to take a post-test that has been prepared. All responses—both feedback and post-test results—are collected via the link: <https://forms.gle/ErcipWYUhz573bY47>. Later, the posttest results will be compared with the pre-test to assess how much participants' understanding has improved after completing the entire series of activities.

C. RESULTS AND DISCUSSION

The findings of this activity indicated that participants' understanding and technical skills in developing digital portfolios improved, as evidenced by the comparison between pre-test and post-test results. This is in line with Riadi et al., (2023) , who reported that website-based portfolio training effectively enhanced students' ability to independently build digital portfolios. Similarly, Hidayat et al. (2025) found that workshops and webinars using frameworks like Bootstrap significantly increased both knowledge and satisfaction levels among participants.

Furthermore, the emphasis on user experience in our program through the application of User-Centered Design (UCD) resonates with Agus et al. (2024), who argue that UCD principles in UI/UX design contribute to better usability, accessibility, and user satisfaction. Additionally, our adoption of Flowbite components within Tailwind CSS aligns with Maharani (2025), who demonstrated that modern frameworks such as Tailwind CSS facilitate efficient, responsive, and user-friendly web development.



Taken together, these findings reinforce the literature showing that project-based learning approaches, when combined with UCD principles and modern frameworks, provide an effective pathway to improving digital literacy and preparing students for professional digital identity building, sessions such as Q&A during its implementation. The following is the agenda for the Webinar and Workshop:

Table 1 Schedule Table

TIME	ACTIVITY	PIC
12.00-13.15	Preparation by the Committee and Distribution of Zoom Link	The whole event committee
13.15 - 13.20	and VG Link (pre-test)	Hilmi Dzakiyuddin Rohman
13.20 - 13.22	Opening by MC	Hilmi Dzakiyuddin Rohman
13.22 - 13.30	Recitation of Holy Quran Verses	Muhammad Thirafi
13.30 - 13.35	Singing of the Indonesian National Anthem and Muhammadiyah March	Muhammad Thirafi
13.35 - 14.00	Reading of the CV of the Webinar Speaker	Akhmad Thauzi
14.00 - 14.05	Webinar	Muhammad Thirafi
14.05-15.05	Reading of the CV of the Workshop Speaker	Najlaa Maharani Dewi
15.05-15.15	by the Moderator	Akhmad Thauzi&Najlaa Maharani Dewi
15.15-15.20	Workshop	Hilmi Dzakiyuddin Rohman

Stage 1 (Activity Socialization)

At this stage, the Community Service Team conducted socialization to the general public through social media while also recruiting interested participants by distributing flyers as shown in Figure 1 below.



Figure 1. Activity Flyer

Stage 2 (Activity Material Preparation)

In this stage, the team prepares the materials to be used in the webinar and workshop sessions, including an introduction to portfolios, types of portfolios, what Flowbite is, basic UI components in Flowbite, an introduction to Tailwind CSS, and preparations required before installation. The materials are created in presentation format (PPT) and will be presented directly by the presenter during the activity.

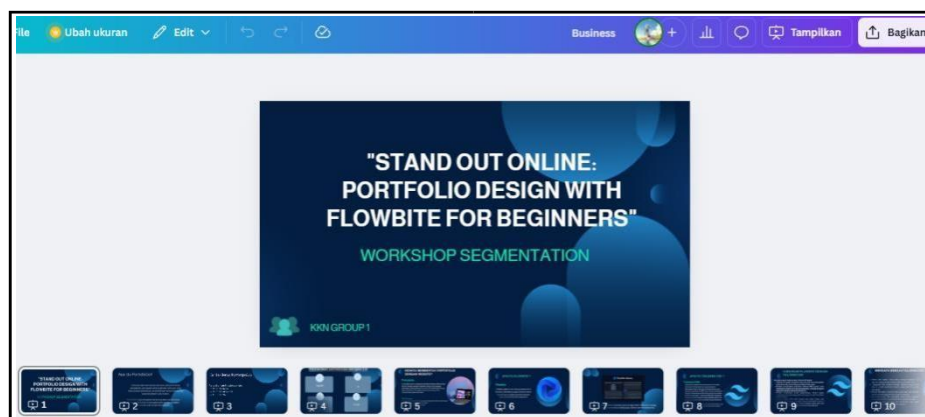


Figure 2. Webinar Activity Materials

Stage 3 (Pre-Test Completion)

In this stage, participants are instructed to complete the Pre-Test provided by the service team. The questions cover topics such as portfolios, flowcharts, Tailwind CSS, and the purpose of the Pre-Test is to assess participants' understanding of the material that will be presented by the service team. The outcome is that participants have a sufficient understanding of the material that will be presented in the future.

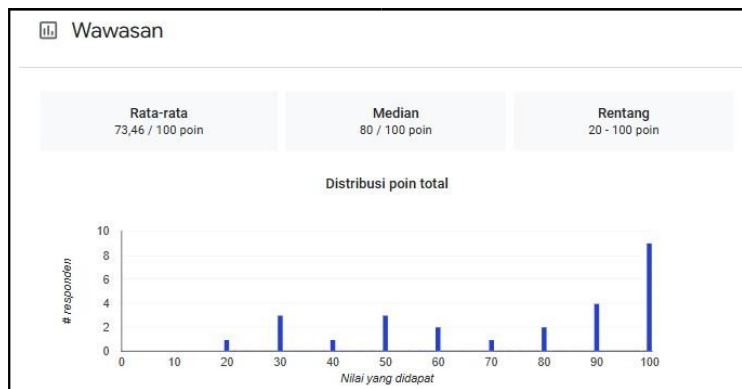


Figure 3. Pre-Test for Participants on Portfolios, Flowbite, and TailwindCSS

In Figure 4, a total of 26 participants took part in this pre-test. The results showed an average score of 73.5, with a median score of 80 and a score range of 20–100. A total of 27% of participants achieved a perfect score (100). These data indicate variation in the participants' initial level of understanding, with a predominance of intermediate understanding of technical material.

Stage 4 (Community Education Through Webinars)

In the webinar session presented by Akhmad Thauzi, he presented the material that had been prepared in the previous stage to the participants. The materials covered included: Introduction to portfolios, types of portfolios and their differences, reasons why portfolios are recommended to be created digitally, introduction to Flowbite, introduction to Tailwind CSS, reasons why Tailwind CSS is recommended, basic UI components of Flowbite, and preparations that must be made before starting a project.

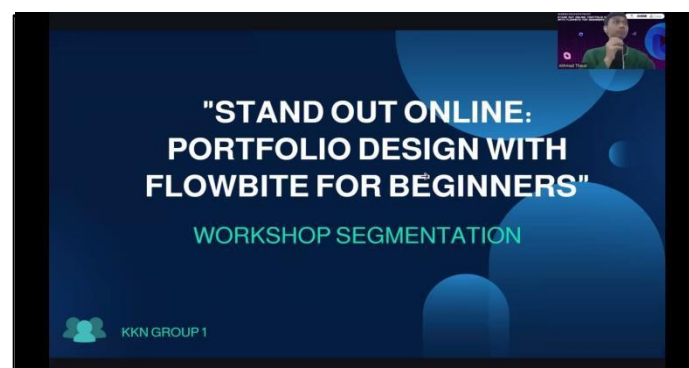


Figure 4. Webinar Presentation Materials

In Figure 4, the presenter shares several key points, starting with an introduction to the concept of a portfolio and its various types, the reasons why a portfolio should be created in digital format, and an explanation of tools such as Flowbite and Tailwind CSS. The presentation also covers the reasons for using Tailwind CSS, an introduction to the basic UI components of Flowbite, and the technical preparations needed before starting a project. The purpose of this session is to provide participants with a comprehensive overview of the

workflow and steps that will be followed during the workshop. It is hoped that after attending this session, participants will understand the benefits of using Flowbite and Tailwind CSS, and be ready to follow the step-by-step process of creating a portfolio.

Stage 5 (Training Through Workshops)

In this session, the workshop presenter, Najlaa Maharani Dewi, presented and implemented several topics previously covered in the webinar session by Akhmad Thauzi. During the workshop, the presenter used Visual Studio Code to demonstrate the process step by step, starting with installing various project requirements such as Node.js, TailwindCSS, React, and Flowbite, followed by configuring Tailwind, and concluding with the first display.

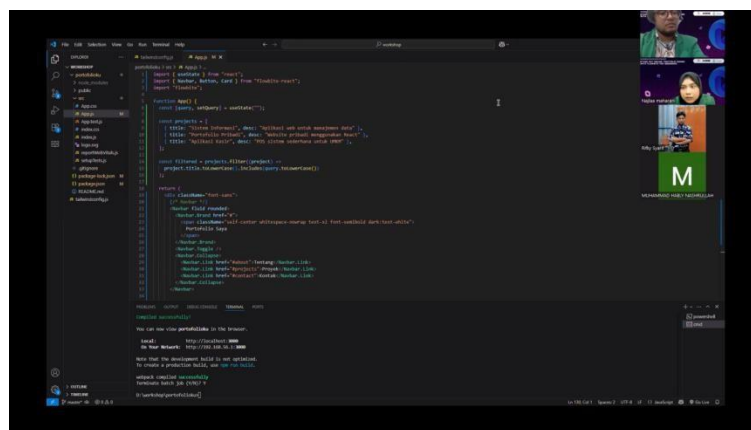


Figure 5 Presentation of Workshop Material

In Figure 5 above, the presenter explains the steps that need to be taken in the coding process to load the first page, where the first page will become a new canvas that can be designed by the participants according to their creativity and ideas.

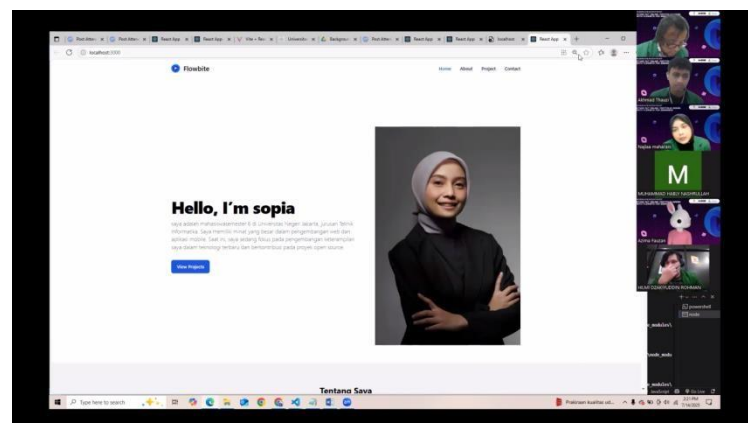


Figure 6 Presentation of Workshop Material

In Figure 6 above, the presenter has finished presenting the material, starting from installing the tools needed to start a new project to how to use Flowbite as the main theme in



this webinar and workshop session. The image above is an example of a simple portfolio website created by the presenter.

Stage 6 (Feedback and Post-Test Completion by Participants)

The activity was evaluated by collecting feedback from participants through a Google Form distributed at the end of the webinar and workshop sessions. Each participant was asked to complete the evaluation as part of the organizers' efforts to assess the overall success of the event. In the form, participants are asked to rate several aspects of the activity, such as the delivery of the material, the relevance of the topic, the interactivity during the session, and the effectiveness of the presenter in explaining the content. The rating is done using a Likert scale with a range of 1 to 5, where 1 means "disagree" and 5 means "strongly agree." This evaluation serves as a basis for determining the extent of participant satisfaction and providing useful input for improvements in similar activities in the future. The following questions are included in the form:

1. Are the webinar and workshop materials consistent with the courses offered in the Computer Science Department at FTUMJ?
2. Are the webinar presenters who deliver the webinar materials consistent with their field of expertise?
3. Are the workshop speakers knowledgeable in their respective fields?
4. Are the webinar speakers able to explain the material well?
5. Are the workshop speakers able to explain the material well?
6. Is the quality of online services during the workshop (sound and image) good?
7. Are the online administrative services provided easy to use?
8. How satisfied are you with this activity?

Feedback:

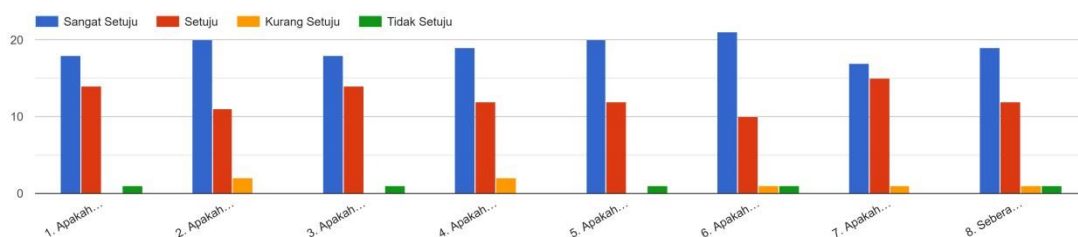


Figure 7 Results of participant satisfaction surveys for webinars and workshops held

Feedback from participants obtained through evaluation questionnaires showed that 95% of participants were satisfied with the material and methods used. They considered these activities useful for improving technical skills in web development. Some participants also expressed a desire to participate in advanced training on more complex topics, such as integrating portfolios with backend systems or adding interactive features. These evaluation results indicate that the training provided has a positive impact on participants' digital literacy, particularly in the creation of modern web portfolios.



In addition to the feedback questionnaire, participants were also asked to complete a post-test administered after the activity concluded, with the aim of assessing improvements in participants' understanding following the activity. The following are the results of the posttest completed by participants:

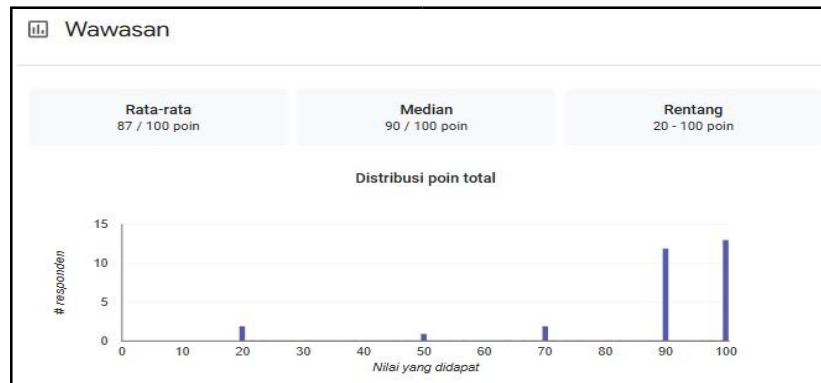


Figure 8. Post-Test Regarding after the webinar and workshop sessionsp

In Figure 9, 30 participants took the post-test, and there was a clear increase in results. The average score rose from 73.5 to 87, while the median score also increased from 80 to 90. In addition, the number of participants who achieved a perfect score also increased –from around 27% in the pre-test to 43% after the session ended. This data reflects that participants' understanding of the material presented has indeed improved significantly..

D. CONCLUSION

Based on the results of the webinar and workshop “Stand Out Online: Portfolio Design with Flowbite for Beginners” held on July 14, 2025, from 1:00 PM to 3:30 PM WIB (Western Indonesia Time) via Zoom, it can be concluded that the event was successful and achieved its intended objectives. The event attracted 33 participants from various institutions, who enthusiastically learned about creating a website portfolio using Flowbite. Participant feedback indicated a high level of satisfaction with the material presented.

This was also reflected in the comparison of pre-test and post-test scores, which showed an improvement in participants' understanding of the material. Based on the evaluation results, the average participant score was 87 out of 100, with a median of 90 and a range of 20–100. Most participants achieved high scores, particularly the highest score of 100. Compared to the pre-test results, where many participants scored below 60, there was a significant improvement around 16%. After the activity, most participants scored above 90, indicating that the delivery method, hands-on practice, and interactive approach were effective in enhancing understanding.



Figure 9. Increase in participants' knowledge based on pretest and posttest

E. ACKNOWLEDGEMENTS

The team would like to express its gratitude to the Computer Science Program, Faculty of Engineering, Muhammadiyah University of Jakarta, for its support, motivation, and facilitation in organizing the webinar and workshop “STAND OUT ONLINE: PORTFOLIO DESIGN WITH FLOWBITE FOR BEGINNERS.” Special thanks are also extended to the committee members and presenters who worked together seamlessly in planning and executing the event. Special thanks are also extended to the participants who attended the webinar and workshop from start to finish. Additional thanks are extended to the alumni who assisted in the MSIB Batch 8 community service activities.

F. AUTHOR CONTRIBUTIONS

In the webinar and workshop “STAND OUT ONLINE: PORTFOLIO DESIGN WITH FLOWBITE FOR BEGINNERS,” each team member has clear contributions and responsibilities to ensure the smooth running of the event and the preparation of scientific articles. Hilmi Dzakiyuddin Rohman, as the event chair, is responsible for overseeing the entire process and supervising the tasks of team members, as well as contributing to the preparation of journals and learning modules. Najlaa Maharani Dewi Tiara Gunawan is responsible for creating flyers, the Community Activity Report, and also serves as a workshop speaker, while Muhammad Thirafi Qaedi Setiawan contributes to the creation of the Community Activity Report, pre-test and post-test forms, and feedback to assess participants' learning outcomes, and acts as a moderator, facilitating the webinar and workshop sessions. And Mrs. Siti Nurbaya acted as the academic advisor, providing guidance, supervision, and support to ensure the smooth conduct of webinars and workshops, as well as reviewing scientific articles.

All team members collaborated to ensure the success of the event and the quality of the publications produced.



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