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FastSnap

Streamlining the Workflow: Evaluation of InShot and FastSnap as a Prototype in Optimizing Video Editing Experience of College Students

Video editing has undergone a dramatic transformation.

Editing Workflow

complexity **complexity** **complexity** **complexity**

Beginners / Casual Users

Traditional



Accessible



**Lack of intuitive/
user-friendly
designs**

Mobile applications offer convenience and on-the-go platforms.



Objectives:

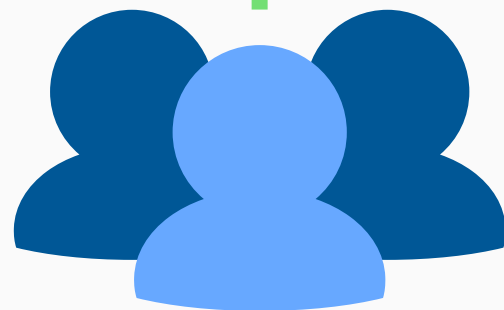
- To assess the user-friendliness and overall effectiveness of InShot and FastSnap in optimizing the video editing workflow for college students.
 - To compare the efficiency of completing common video editing tasks using InShot and FastSnap.
 - To identify the video editing features most valued by college students.

Methodology

1

Gather 20 participants who are college students.

Between-Subjects Design



10 Testers of FastSnap

* Wizard of Oz Observation



10 Testers of InShot

2

Invite them by answering a Google Form questionnaire.

3

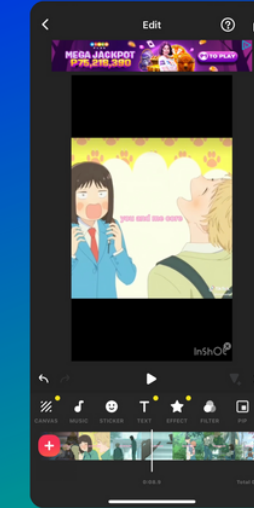
Have them perform steps according to the instructions.

4

Fill out what is being asked.

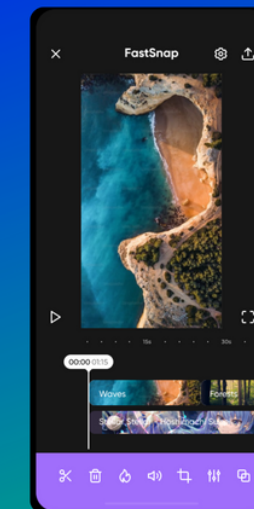
- 5-Point Likert Scale
- 2 Open-Ended Questions

For InShot users:



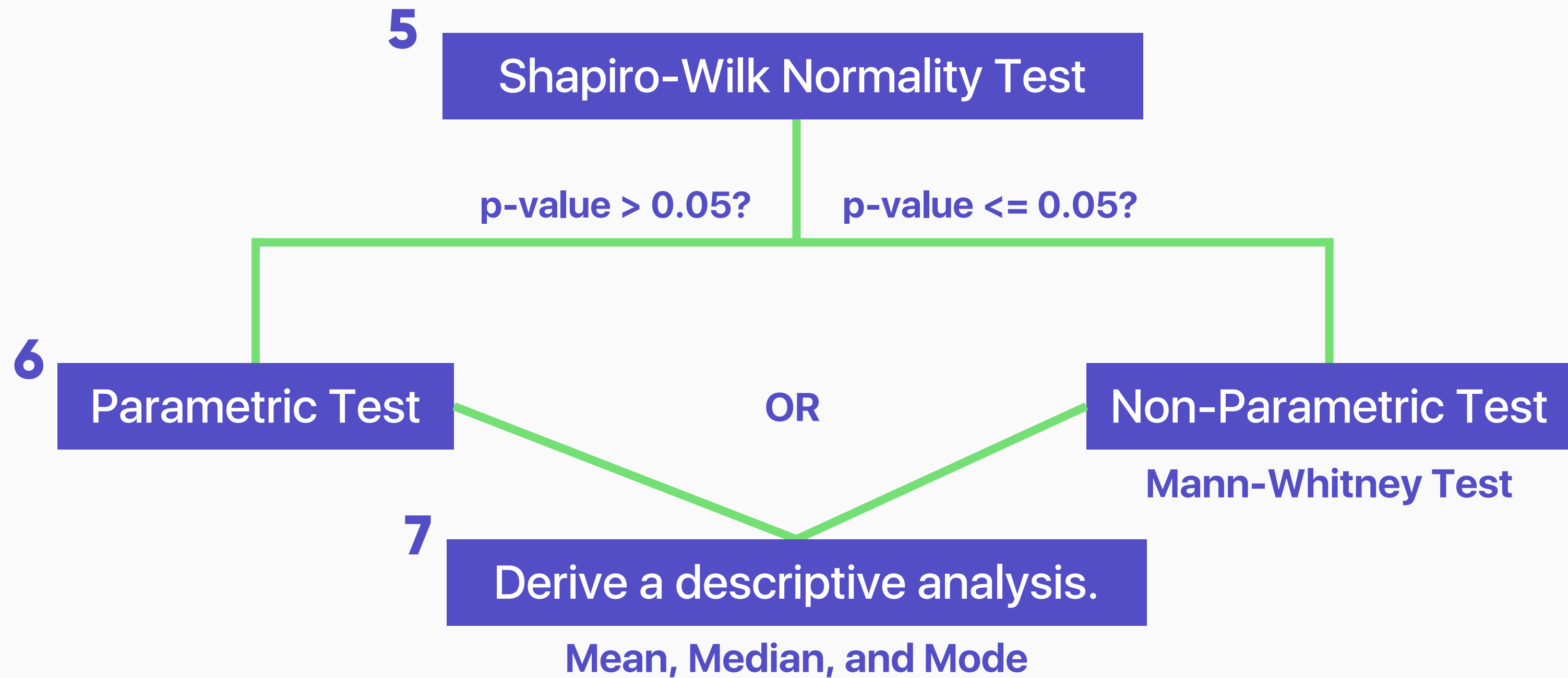
1. Navigate the video editing interface of the app.
2. Select a clip from the app.
3. Click the clip and turn the volume down.
4. Add background music.
5. Export a 1080p MP4 video.
6. Return to home and go back to the draft of the previously exported video.
7. Go back to the home page. That's all!

For FastSnap users:



1. Create a "snap" and select three videos from the top.
2. Click the volume button and apply to all.
3. Click the full screen on the right side and go back to the main interface.
4. Add music by clicking the button below the clips.
* Music is auto-selected. Just click add.
5. Export an 1080p MP4 video.
6. Save the clip for draft.
7. Return to home, click the question mark icon to navigate the "About" page.
8. Go back to the draft of the previously exported video.
9. Return home. That's all!

Statistical Analysis





Python Requirements:

Shapiro-Wilk Normality Test

- `import pandas, scipy`

Mann-Whitney Test

- `import matplotlib, mannwhitneyu, mode`

Results and Discussion

Shapiro-Wilk Normality Test

```
Shapiro-Wilk Test Results:  
Learnability: p-value = 0.0001 (likely non-normal)  
Efficiency: p-value = 0.0001 (likely non-normal)  
Error Tolerance: p-value = 0.0065 (likely non-normal)  
Usability: p-value = 0.0000 (likely non-normal)  
Functionality: p-value = 0.0001 (likely non-normal)  
Overall Impression: p-value = 0.0016 (likely non-normal)
```

The p-values are ≤ 0.05 , therefore, normal distribution is not assumed and a non-parametric test (Mann-Whitney Test) is best chosen for further analysis.

Results and Discussion

Mann-Whitney Test

```
===== Mann-Whitney Test Results =====  
Learnability: U = 59.0000, p-value = 0.4702  
Efficiency: U = 65.0000, p-value = 0.2219  
Error Tolerance: U = 40.0000, p-value = 0.4498  
Usability: U = 71.0000, p-value = 0.0722  
Functionality: U = 59.5000, p-value = 0.4505  
Overall Impression: U = 57.5000, p-value = 0.5718
```

The p-values are > 0.05 , which means that there are no statistically significant difference between the medians. The decision is to fail to reject the null hypothesis.

Results and Discussion

Mann-Whitney Test

Hypothesis:

Users will report feeling significantly more familiar and comfortable using the FastSnap prototype compared to the InShot application.



There is no significant difference in user familiarity and comfort between the FastSnap prototype and the InShot application.

Results and Discussion

Mann-Whitney Test

===== Descriptive Statistics =====

For InShot:

Learnability: Mean = 4.30, Median = 4.50, Mode = 5
Efficiency: Mean = 4.20, Median = 4.00, Mode = 4
Error Tolerance: Mean = 4.10, Median = 4.00, Mode = 5
Usability: Mean = 4.20, Median = 4.00, Mode = 4
Functionality: Mean = 4.20, Median = 4.00, Mode = 4
Overall Impression: Mean = 4.00, Median = 4.00, Mode = 5

For FastSnap:

Learnability: Mean = 4.60, Median = 5.00, Mode = 5
Efficiency: Mean = 4.60, Median = 5.00, Mode = 5
Error Tolerance: Mean = 3.60, Median = 4.00, Mode = 4
Usability: Mean = 4.80, Median = 5.00, Mode = 5
Functionality: Mean = 4.50, Median = 5.00, Mode = 5
Overall Impression: Mean = 4.30, Median = 4.50, Mode = 5

InShot

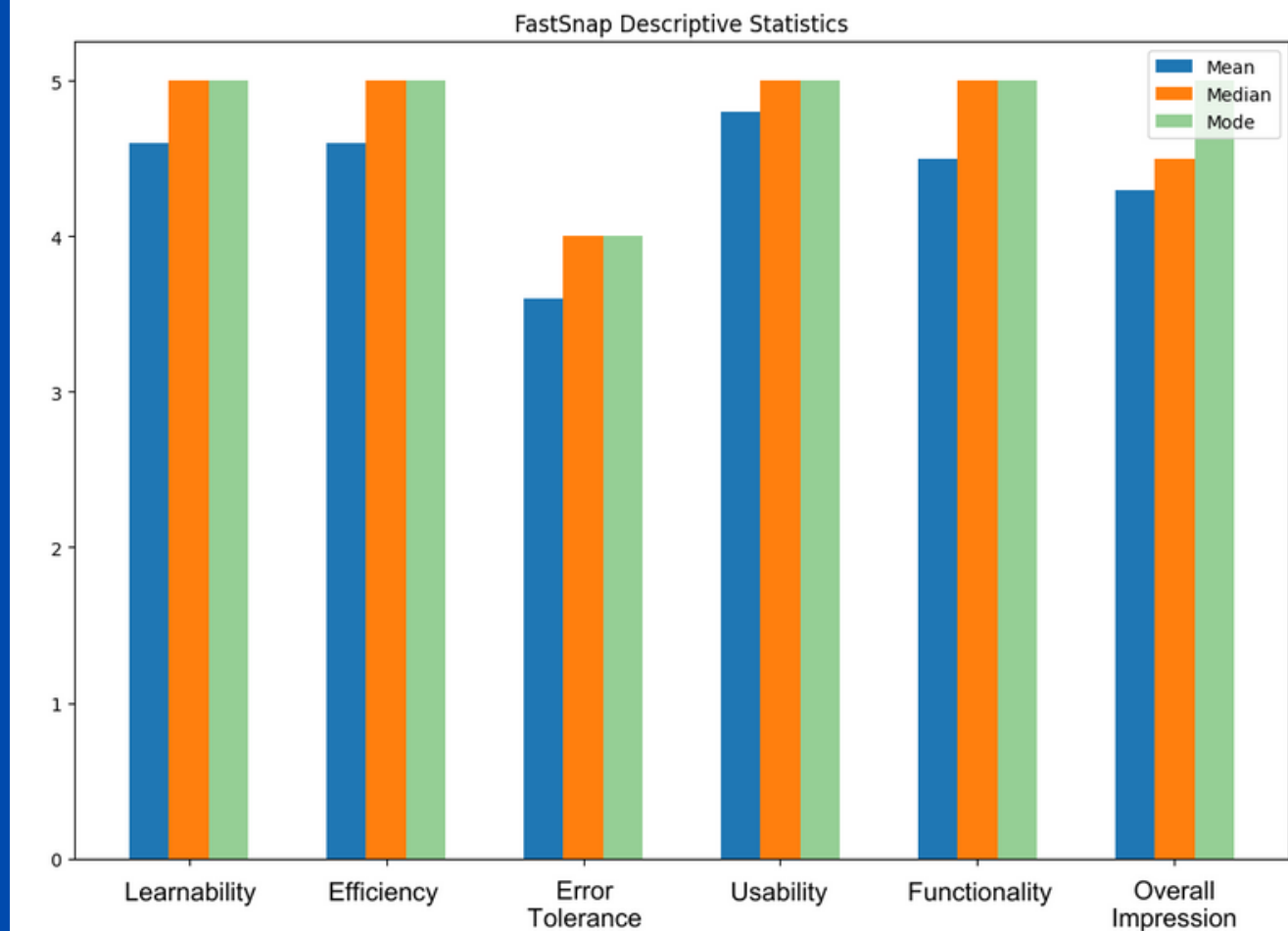
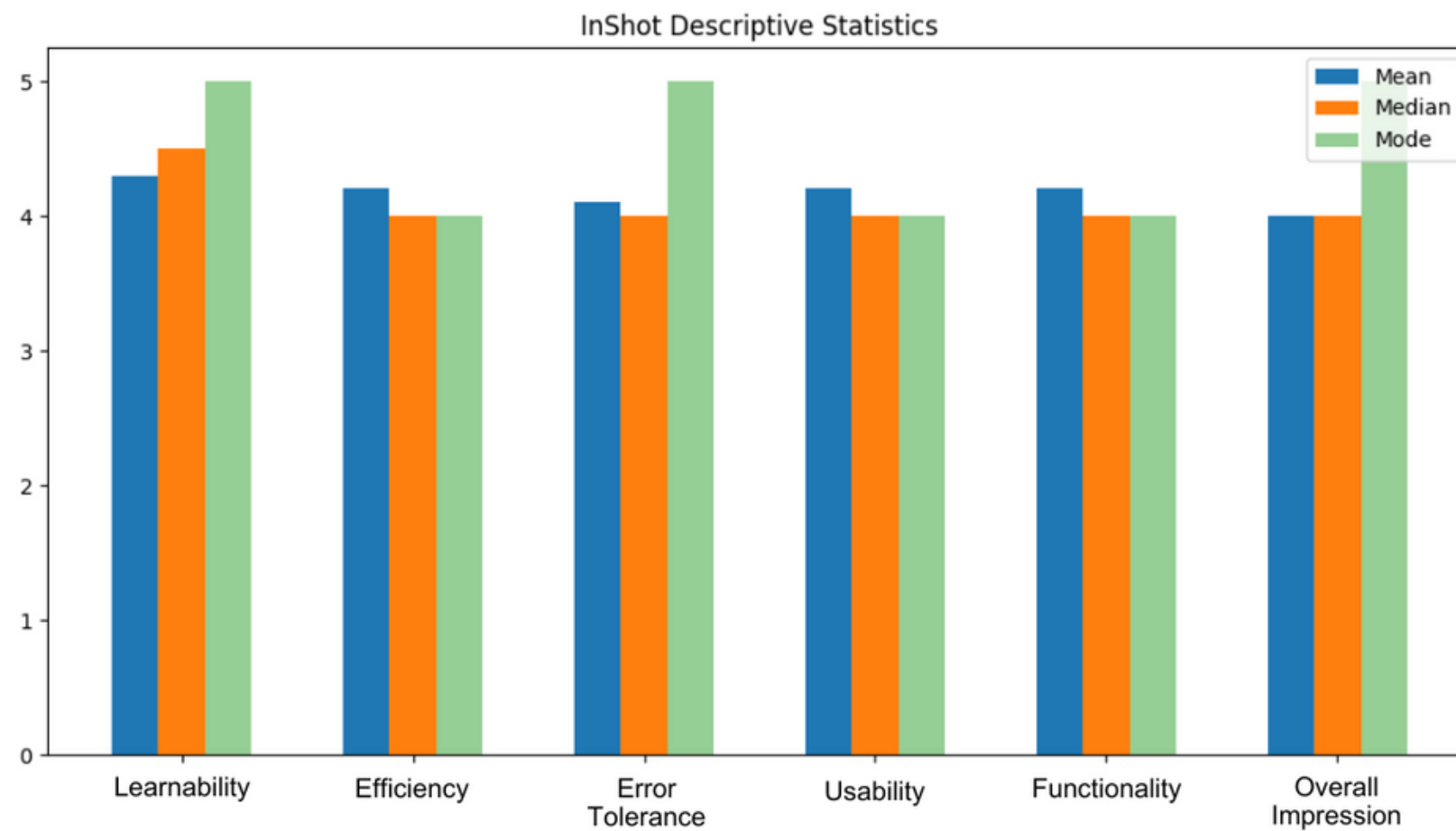
- Mean: 4.00 to 4.30
- Median: 4.00 to 4.50
- Mode: 4.00 to 5.00

FastSnap

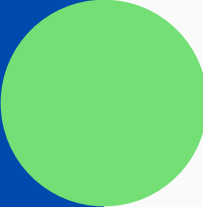
- Mean: 3.60 to 4.80
- Median: 4.00 to 5.00
- Mode: 4.00 to 5.00

Results and Discussion

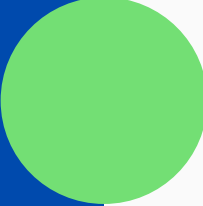
Mann-Whitney Test



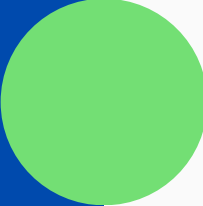
Conclusion



Both designs of InShot and FastSnap received positive user satisfaction ratings.



There is no significant difference in user familiarity and comfort between the FastSnap prototype and the InShot application.



Future research with larger sample sizes could provide more definitive results regarding the effectiveness of these design approaches.

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