Digitalize Aksara Lampung as Culture Preservation in Digital Era

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Why?

- Lampung is one of Indonesia heritage. Lampung have it’s own language and character to communicate and interact inside Lampung society.
- Lampung characters face challenge in modern age because less and less people use it to communicate especially because there were no default support for Lampung character in computer system.
- Development of aksara Lampung in digital font (Meizano & Martinus, 2015) were meant to rejuvenate people interest in using aksara Lampung as a way to communicate using computer based media.
- The font were tested in against expert, and received favorable review.
- To support convenience and user friendly for public; use by computer based system such as desktop pc, smartphone and tablet from the get go.
- One way to provide this by proposing the font to Unicode standard. If included in Unicode standard, the font can be used directly, without installing a separate font file.
- To make sure the font proposed to Unicode is the highest standard in quality and usability, it is important to measure user experience (UX) in Lampung characters usability.
The Unicode Standard

• The Unicode Standard is the universal character encoding standard for written characters and text.

• Required in new Internet protocols and implemented in all modern operating systems and computer languages such as Java and C#, Unicode is the basis of software that must function all around the world.

• With Unicode, the information technology industry has replaced proliferating character sets with data stability, global interoperability and data interchange, simplified software, and reduced development costs.
# Lampung Characters and Transliteration

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non-vocal
UX Methodology

1. Requirement Gathering
2. Alternative Design
3. Prototyping
4. Evaluation
Requirement

- There are two main parameters that need to be measure:
  - Readability
  - Accessability
Keyboard Layout
Keyboard Layout with SHIFT
Evaluation

- 30 participants
- Young people
- Knowledge of Lampung character
- Usability testing:
  - Reading
  - Typing
- Lampung characters usage recommendations
Knowledge of Lampung Characters

Know
- Yes: 87%
- Not Yet: 13%

Can use
- Yes: 83%
- Not Yet: 17%
Reading (Font Size)

Readability base on Font Size

- Size 28
- Size 22
- Size 14
Typing Time

Typing based on sentence complexity

- Simple: 51.8 seconds
- Medium: 56.7333333 seconds
- Complex: 80.3666667 seconds
Typing Difficulty

Typing based on sentence complexity

Difficulty (scale of 10):
- Simple
- Medium
- Complex
Typing Correctness

Typing based on sentence complexity

Typing Correctness (%)

Correctness (%)

- Simple: 60%
- Medium: 67%
- Complex: 63%
Usage Recommendation

Lampung Character Recommendation

- Cryptography: 1
- Preservation/Publication of Lampung Character: 13
- Cultural Activity: 9
- Signage: 2
- Communication: 9
- Creating article: 8
- Education: 12

Responden
Conclusion

• Based on data, there are some refinement need to be done to achieve a better digital font. A larger default character and some refinement on typography.

• The font itself manage to achieve a favorable review on usable and useful aspect of UX.

• According responses users, digital aksara Lampung have to be spread out more, in order to support the local value and uniqueness of Lampung.
Thank You

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