## **Critique Scales**

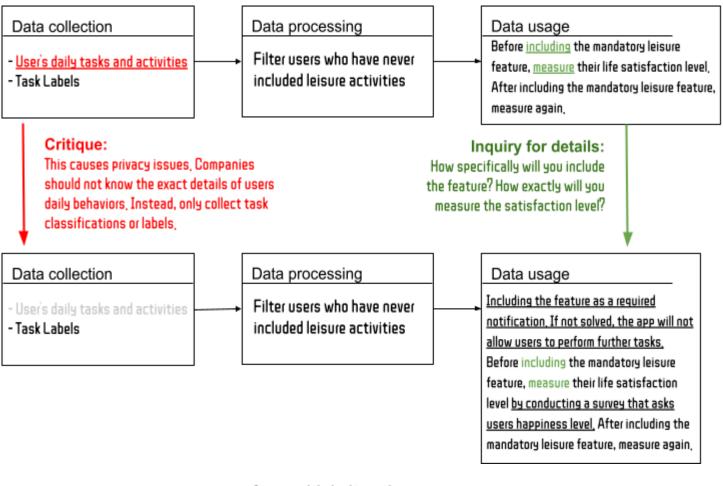
Level 1	Justified: The critique is well-founded, with clear reasoning and supporting evidence.  Actionable: Provides concrete, practical steps that can be immediately implemented to address the issue.  Specific: Targets a particular aspect of the project, providing detailed feedback on what needs improvement or change.	"The current data collection method risks exposing user privacy because it logs detailed daily behaviors without anonymization. To mitigate this, implement data anonymization techniques before storage and restrict access to only aggregated data for analysis."
Level 2	Justified: The critique is reasonably well-supported, but the justification may lack depth or be more generalized.  Actionable: Offers suggestions for improvement, but the steps may be less detailed or require additional interpretation before they can be applied.  Specific: Addresses a relevant area but may cover broader issues without focusing on a single, specific aspect.	"The app's data collection practices could lead to privacy concerns. Consider adjusting the data collection policies to include user consent."
Level 3	Justified: The critique may be based on personal opinions or assumptions with limited evidence or reasoning provided.  Actionable: The critique lacks clear, practical steps or offers vague suggestions that are difficult to implement without further clarification.  Specific: The critique is broad and unspecific, making it hard to pinpoint what exactly needs to be improved.	"This app might be invading users' privacy. Maybe look into this issue."

## Four data action primitives

Primitives	Examples
Data Collection	Collection and storage
Data Processing	Re-identifying, anonymization, inference, and aggregation
Data Sharing	Sharing, dissemination, transfer, and increasing data accessibility
Data Usage	Decision interference and knowledge discovery

## **Example Design**

Hypothesis: Productivity apps help users keep track of tasks, thus promoting work-life balance. A typical productivity app includes features like scheduling and categorizing tasks. It also helps users visualize various tasks into daily to-do lists or monthly calendars. The app developers of a certain productivity app are interested in determining whether requiring users to schedule both leisure and work activities in their daily plans can increase their overall life satisfaction.



## ... after multiple iterations

