Project Proposal Update: Expert and Peer Feedback for

CS 5140/6140: Human Factors in Computing

Spotlight

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October 05, 2025

Importance-Difficulty Matrix

Listing the feedback

FB1. Users should be able to view and edit their own algorithm.
FB2. Clarify how the algorithm starts for a new user (e.g., does it need initial setup?).
FB3. Explain how a user can adjust the algorithm over time.
FB4. Clarify how much one like/dislike affects the algorithm.
FB5. Make the personal algorithm visible and directly editable.
FB6. Provide a history of likes/dislikes and allow users to edit it to modify the algorithm.
FB7. Allow filtering by content (e.g., short videos, long videos, posts).
FB8. Let users choose algorithmic profiles (e.g., "funny" for relaxing, "study" for academic content).
FB9. Add the ability to opt-out of exploring different interests if users prefer sticking to known topics.
FB10. Give users the ability to explain why they liked or disliked a post (specific aspects).
FB11. Prevent content mislabeling (e.g., videos flagged incorrectly) from hiding posts unnecessarily.
FB12. Provide a searching feature.
FB13. Allow users to subscribe to hashtags/interests (e.g., #cooking) for guaranteed content.
FB14. Enable users to occasionally select categories/interests for new or random content — balancing personalization with discovery.
FB15. Add a way to follow creators directly.
FB16. Expand the social aspect beyond a feed: enable comments, messaging, following, or collaboration.
FB17. Make it clear how the platform goes beyond being just a personalized news feed.

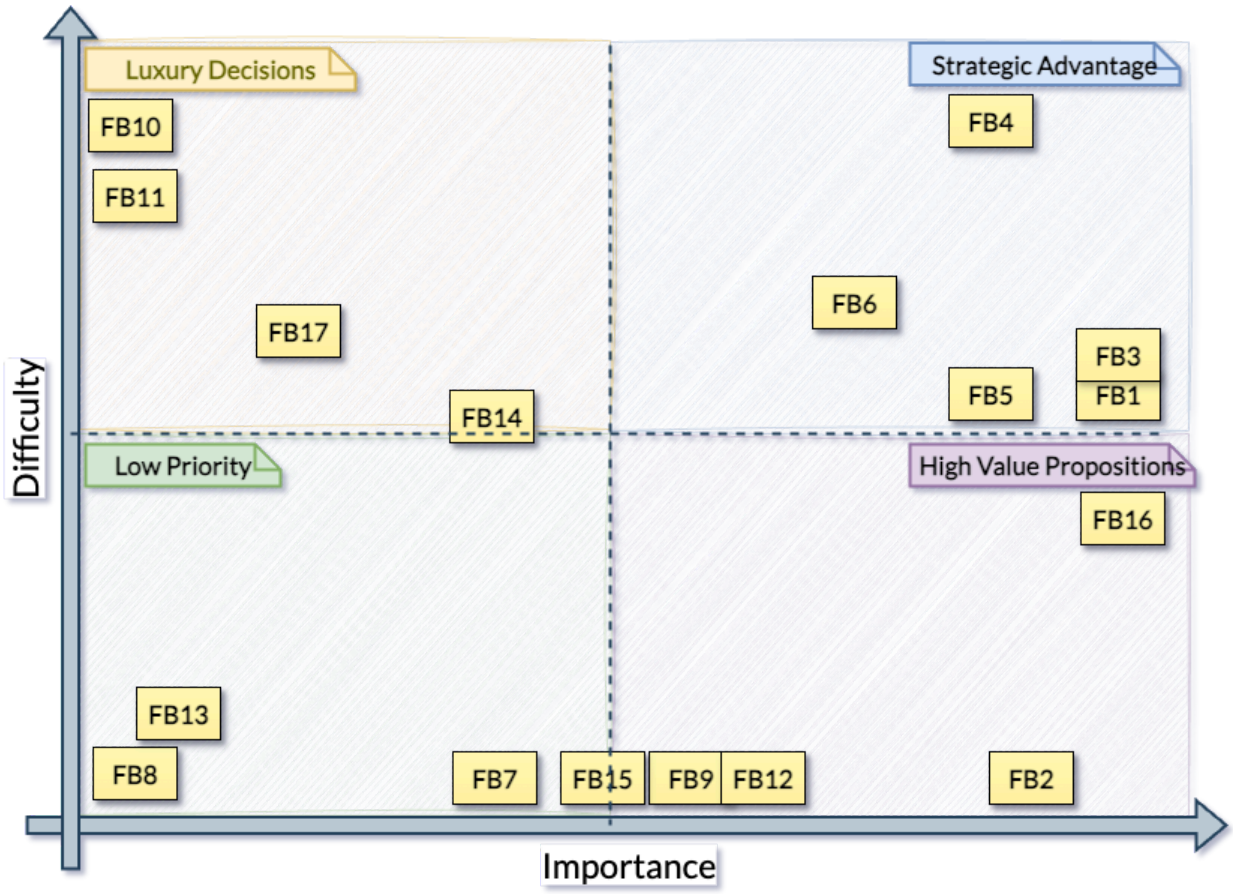
Based on the feedback, if we would like to prioritize it based on "Importance", we would have the following list:

1. **Very High Importance (core to our proposal's novelty and user agency)**
    a. FB1: View and edit own algorithm
    b. FB2: Clarify how algorithm starts for a new user
    c. FB3: Explain how a user can adjust algorithm over time
    d. FB4: Clarify how much one like/dislike affects algorithm
    e. FB5: Make personal algorithm visible and directly editable
    f. FB6: Provide a history of likes/dislikes and allow editing
    g. FB16: Expand social aspect: comments, messaging, following, collaboration
2. **Moderate Importance (enhances usability/personalization, but not core novelty)**
    a. FB7: Allow filtering by content (short/long videos, posts)
    b. FB9: Add ability to opt-out of exploring different interests

c. FB12: Provide a searching feature
d. FB14: Enable occasional selection of categories/interests for new/random content
e. FB15: Add a way to follow creators directly

3. **Lower Importance (nice-to-have refinements)**
   a. FB10: Ability to explain why user liked/disliked a post (specific aspects)
   b. FB11: Prevent content mislabeling from hiding posts unnecessarily
   c. FB17: Make it clear how platform goes beyond being just a personalized feed
   d. FB13: Allow subscribing to hashtags/interests (#cooking)
   e. FB8: Let users choose algorithmic profiles ("funny" vs. "study")

Now, if we place the feedback on our Importance-Difficulty matrix, we get the following results:



Explain the placements of feedback on your Importance-Difficulty Matrix

In building the Importance–Difficulty Matrix, we focused on both the value that each feedback item brings to users and the level of difficulty involved in implementing it. The final placements reflect how each suggestion contributes to the novelty of our proposal and the feasibility of execution.

High Value Propositions include features that are important for strengthening the user experience while being relatively easier to implement. FB2, clarifying how the algorithm starts for a new user, is essential for onboarding and can be addressed through simple setup steps. FB16, expanding the social aspect through comments, messaging, following, and collaboration, makes the platform more engaging and socially interactive while relying on established design patterns. FB9, adding the ability to opt out of exploring different interests, FB12, providing a searching feature, and FB15, adding a way to follow creators directly, are all features that give users more control and personalization without requiring complex development.

Strategic Advantage features define the uniqueness of our platform but also demand greater technical investment. FB1, viewing and editing the algorithm, and FB5, making the personal algorithm visible and directly editable, both require building an interface for transparency in recommendation systems. FB3, explaining how a user can adjust the algorithm over time, and FB4, clarifying how likes or dislikes affect the algorithm, involve designing feedback loops that users can understand and use. FB6, providing a history of likes and dislikes with the ability to edit them, requires changes in both data storage and machine learning logic. These features are more difficult but also represent the strategic edge of our proposal.

Low Priority features are useful but not as central to the novelty of the idea. FB7, allowing filtering by content such as short or long videos, and FB8, letting users choose between algorithmic profiles such as funny or study, enhance personalization but can be considered secondary. FB13, allowing users to subscribe to hashtags or interests like cooking, is easy to implement but does not strongly contribute to the distinctiveness of the platform.

Luxury Decisions are features that require high effort while offering relatively less impact on the core contribution. FB10, giving users the ability to explain why they liked or disliked a post, and FB11, preventing content mislabeling from hiding posts, both require advanced systems such as multi-level feedback or AI-driven moderation and their absence does not detract from our core experience. FB14, enabling occasional selection of categories or interests for new or random content, adds novelty but has lower priority compared to algorithm transparency. FB17, making it clear how the platform goes beyond being just a personalized feed, is important conceptually but difficult to operationalize, as it requires systemic changes in positioning and user experience.

In summary, the matrix highlights which feedback can be addressed early for maximum value, which features define the long-term vision of the platform, and which ideas can be deferred as optional refinements. This structure helps us focus development efforts on elements that balance feasibility with the novelty of our proposal.

Updated Concept Map

Before drawing the concept map, we would like to introduce our finalized features after adding the "High Value Propositions" and "Strategic Advantages".

Feature List of Spotlight Social Media Platform

1. User Onboarding & Profile Management
    a. Sign-up process with profile creation.
    b. Users specify interests (topics they want to see).
    c. Users specify content preferences (topics they don't want to see).
    d. Ability to change interests and ratings anytime from profile settings.
    e. FB5: Make the personal algorithm visible and directly editable.

2. Content Feed & Algorithm
    a. Posts shown based on stored user interests.
    b. Algorithm highlights top posts in the user's chosen interests.
    c. Occasional display of different points of view to broaden perspectives.
    d. Posts can be expanded with new/beginner topics in chosen fields.
    e. Posts can also surface certified experts in the field for trusted learning.
    f. FB1: Users should be able to view and edit their own algorithm.
    g. FB3: Explain how a user can adjust the algorithm over time.
    h. FB9: Add the ability to opt-out of exploring different interests if users prefer sticking to known topics.

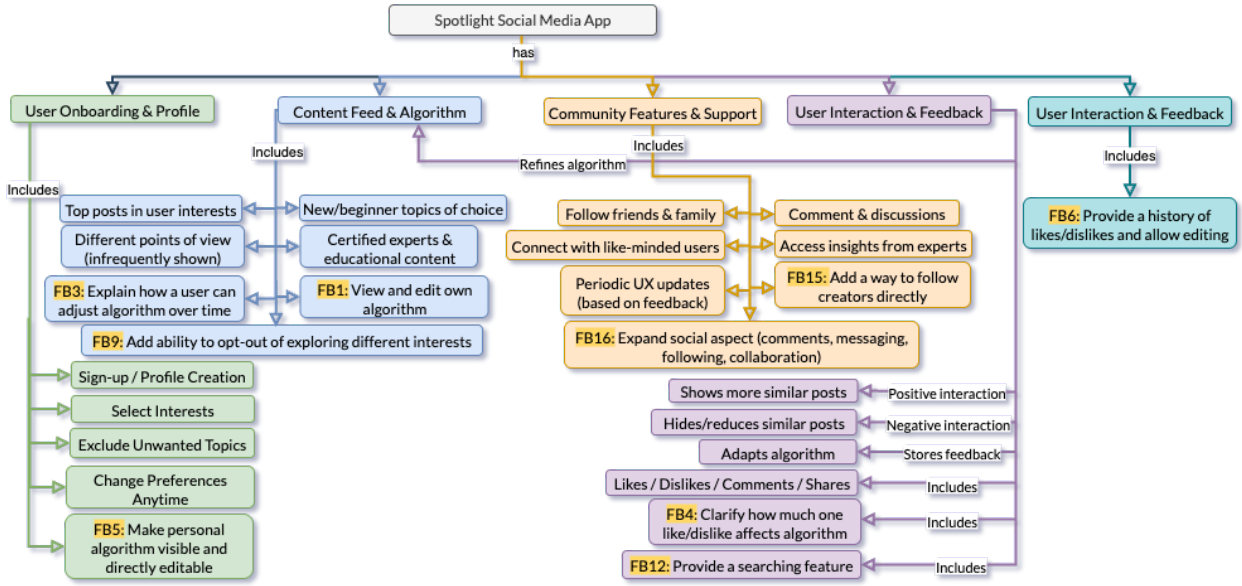
3. User Interaction & Feedback
    a. Users can like, dislike, comment, or share posts.
    b. System captures positive and negative interactions.
    c. Algorithm adapts dynamically:
    d. Increases positively interacted posts.
    e. Hides or reduces negatively reacted posts (to encourage balanced engagement).
    f. All interactions are stored for future personalization.
    g. FB4: Clarify how much one like/dislike affects the algorithm.
    h. FB12: Provide a searching feature.

4. Community Features
    a. Follow friends and family to stay connected.
    b. Discover and connect with like-minded users based on shared interests.
    c. Engage in discussions with others on posts.
    d. Build supportive communities around specific topics.
    e. FB15: Add a way to follow creators directly.

f. FB16: Expand the social aspect beyond a feed: enable comments, messaging, following, or collaboration.

5. Adaptive & Evolving User Experience
    a. Feedback loop: Algorithm continuously adapts as user preferences evolve.
    b. Periodic UX updates based on aggregate user feedback.
    c. Platform ensures feeds remain relevant, safe, and user-focused over time.
    d. FB6: Provide a history of likes/dislikes and allow users to edit it to modify the algorithm.

Updated Concept Map:



Concept Map Explanation:

The concept map illustrates how our proposed platform integrates both existing and newly prioritized feedback features into its structure.

Starting with User Onboarding & Profile, the map shows how new users set their preferences through sign-up, interest selection, and exclusion of unwanted topics. To enhance transparency, FB5 adds the ability for users to make their personal algorithm visible and directly editable at this stage.

The Content Feed & Algorithm section captures how posts are curated and refined. In addition to surfacing top posts, new topics, and certified experts, this branch now includes FB1, viewing and editing the algorithm directly, and FB3, explaining how users can adjust the algorithm over time. FB9, the option to opt out of exploring different interests, ensures that users maintain control over their feed's diversity.

Community Features & Support expands the platform's social dimension. Traditional features such as following friends, connecting with like-minded users, and accessing expert insights are enhanced by FB15, the ability to follow creators directly, and FB16, which expands social aspects to include messaging, comments, and collaboration. These additions ensure that the platform fosters genuine community building.

User Interaction & Feedback remains central to algorithmic adaptation. Likes, dislikes, comments, and shares feed into the system, where positive interactions show more similar posts and negative interactions reduce them. FB4 clarifies how much each like or dislike influences the algorithm, giving users a transparent view of the feedback loop. FB12, the search feature, is also positioned here, reinforcing interaction by enabling active content discovery.

Finally, Adaptive & Evolving User Experience is reflected in FB6, which allows users to view and edit a history of their likes and dislikes. This capability ensures that the platform does not only react to real-time interactions but also evolves based on a user's ability to revise past feedback, creating a more adaptive and long-term personalized experience.