Human-Computer Interaction Design

Homework Assignment 1

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1. Understanding

Context

The goal of this project is to create a forum-like application designed to help parents and guardians with the task of taking care of children of all ages using information gathered from professionals on topics they are unfamiliar with and parents, who are willing to share their experiences in certain situations and how you might proceed should you find yourself in such a case.

Interview Audience

Target Audience:

- Parents / Guardians
- Grandparents
- Soon-to-be Parents

The target audience are persons who need help to learn how to support their children by sharing their struggles, insights, experiences, educational content and conflict resolution methods and questions.

Subgroups:

- Computer Literacy:
 - Computer Literate: A person who is comfortable using computers and technology and is familiar with conventional user interfaces;
 - Computer Illiterate: A person who has little or no knowledge of how to use the internet and/or computer components;
 - Computer Semi-literate: A person who has some basic computer skills but is not fully confident or proficient.

The goal is asking different groups of people, with varying levels of computer literacy, to ensure the website is accessible to a wider audience.

- Special needs

Guardians raising children with special needs need the most help when it comes to raising their children due to the unique circumstances of their cases. Other users of the application may offer solutions that conventional literature does not.

Interview Questions

The questions asked in the interviews are with the goal to:

- To identify common struggles parents face in communication and conflict resolution;
- To identify common struggles of parents of special needs children (if they are a parent of a child with special needs);
- To understand and learn of resources or support they currently use/might need;
- To discover what digital features would be beneficial when seeking for a digital solution of their problems;
- To share universal and/or unique experiences in their parenting journey.

2. Interview

Questions

Questions to determine user background:

- 1. Can you describe your experience with using online forums or social media for parenting advice?
- 2. What challenges do you face when searching for parenting advice online?
- 3. How often do you participate in online discussions or ask questions in forums or social media groups?
- 4. How do you verify whether parenting advice online is trustworthy?
- 5. Would you prefer to look up parenting information in one place, or do you not mind visiting multiple websites/sources?

Desired Features:

- 1. What type of content would you like to see in a parenting forum (e.g., expert articles, personal experiences, Q&A, live discussions)?
- 2. What features would make a parenting forum more helpful for you?
- 3. How important is it for you to connect with parents in your local area versus a global audience?
- 4. Would you be interested in features like upvoting helpful responses, bookmarking posts, or receiving personalized recommendations?

Child-Specific Needs:

- 1. Do you have a child with special needs, and if so, what challenges do you face in finding support and information?
- 2. What topics would you like to be covered?
- 3. When it comes to being a parent, what are the biggest sources of struggle?

Community and Moderation:

- 1. How do you think online parenting communities should handle misinformation or controversial topics?
- 2. What kind of community guidelines or moderation rules would make you feel safe and comfortable engaging in discussions?
- 3. What concerns do you have about sharing personal experiences or seeking advice in an online community?

Here are some of the more meaningful answers we received when conducting interviews:

1. Can you describe your experience with using online forums or social media for parenting advice?

- I mostly use Facebook groups and a few parenting subreddits. While they are helpful, I find the information inconsistent—some advice is excellent, while other comments feel like pure opinion with no backing.
- I've started browsing pregnancy forums but feel overwhelmed. Everyone has a different opinion, and it's hard to tell what's reliable.
- I prefer structured sites with expert advice, like parenting blogs or YouTube channels. Forums can be useful, but I hate the negativity in some discussions.
- I rely heavily on autism-specific forums and adoption communities. Finding parents with similar experiences has been invaluable. However, some forums are filled with judgment rather than support.

2. What challenges do you face when searching for parenting advice online?

- Sifting through the sheer amount of information is difficult. I wish there were clearer, organized answers.
- Finding trustworthy, practical advice that applies to grandparents who are caregivers can be tricky. Most content is directed at younger parents
- Misinformation is a huge problem. Also, many online discussions turn into heated debates instead of helpful conversations.

3. How often do you participate in online discussions or ask questions in forums or social media groups?

• I read a lot but rarely post. When I do, it's usually for specific questions.

- I post often, especially in autism support groups. I also share my experiences to help others.
- I engage a lot in moderated forums, but I avoid social media groups since they often spiral into negativity.

4. How do you verify whether parenting advice online is trustworthy?

- I cross-check information with multiple sources, especially medical websites.
- I check for expert references and look for consensus across multiple sources.
- I prioritize firsthand experiences from other special-needs parents and professional sources.

5. Would you prefer to look up parenting information in one place, or do you not mind visiting multiple websites/sources?

- I'd love a one-stop resource! It would save so much time.
- A central platform for special-needs parenting would be a game-changer.
- One place with reliable info would be ideal.
- A single, well-moderated site would be fantastic.

6. What type of content would you like to see in a parenting forum?

- Personal stories and Q&As.
- Pregnancy and newborn care tips.
- Discussions on special-needs parenting.

7. What features would make a parenting forum more helpful for you?

- An adoption/special-needs section.
- A section for first-time parents.
- Clear categories by age group.

8. How important is it for you to connect with parents in your local area versus a global audience?

- Global offers diverse perspectives.
- Special-needs support is more valuable than location.
- As long as discussions are well-moderate it doesn't matter.

9. Would you be interested in features like upvoting, bookmarking, or recommendations?

- All interviewees agreed these would be helpful.

10. Do you have a child with special needs? What challenges do you face?

- My 8-year-old has autism. Finding real-world practical advice is hard.
- My grandson has cerebral palsy. Accessibility and therapy guidance would help.

11. What topics would you like to be covered?

- Discipline and routines.
- Sensory-friendly activities.
- Pregnancy myths vs facts.
- Grandparenting and bonding.
- Bonding with adoptive children.
- Mental health for parents.

12. When it comes to being a parent, what are the biggest sources of struggle?

- Balancing work and kids.
- Managing meltdowns in public.
- Keeping up with new parenting styles.
- Teen discipline.

13. How should online communities handle misinformation?

- Most agreed on moderation and flagging for fact-checking.

14. What kind of community guidelines or moderation rules would make you feel safe?

- Strict rules against shaming.
- Clear anti-discrimination policies.
- Respectful disagreements encouraged.
- No tolerance for toxic behavior.

15. What concerns do you have about sharing personal experiences online?

- Judgmental people.
- Saying something wrong.
- Trolls and bad advice.

3. Similar products

1. Reddit (https://www.reddit.com/r/Parenting/)

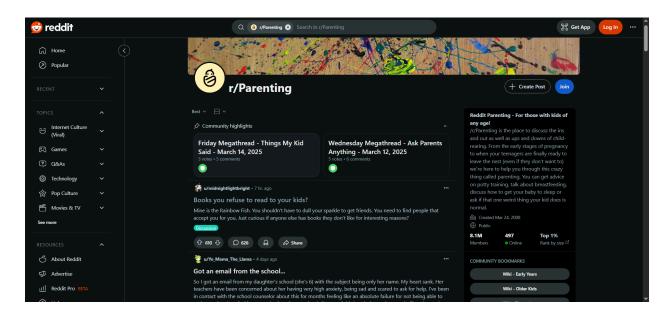
Reddit is a community driven-platform where users pick a specific topic of discussion. In this case we've taken an example of the r/Parenting subreddit although there are many more e.g. r/ParentingTeenagers, r/ParentingFails, r/ParentingADHD etc. that give more specific filtering of the parenting genre.

Advantages:

- -Diverse Perspectives: Parents from different backgrounds and experiences share their insights, making it a valuable resource for various parenting challenges.
- -Topic-Specific Subreddits: The ability to join niche subreddits (e.g., r/ParentingTeenagers, r/ParentingADHD) allows parents to get more tailored advice.
- -Anonymity: Users can ask sensitive questions without fear of judgment, making it easier to discuss difficult topics.
- -Real-Time Engagement: Discussions are often active, with quick responses from a large community.
- -Upvoting System: Helpful advice tends to rise to the top, making it easier to find quality responses.

Disadvantages:

- -Not specialized: Reddit is a platform that has many subreddits, and users who want to seek parenting specific content might find it tedious to encounter other unrelated content to that topic.
- -Misinformation Risk: Since anyone can post, there's no guarantee that advice is accurate or based on expert knowledge.
- -Toxicity & Judgment: Some threads can become judgmental, leading to unhelpful or harsh responses.
- -Overwhelming Content: With so many opinions, it can be hard to filter out the most relevant and reliable information.
- Lack of Professional Guidance: While there are experienced parents, most responses come from regular users, not certified experts.
- Algorithmic Limitations: Good advice might get buried if it doesn't receive enough upvotes, while controversial or sensational posts can dominate discussions.



2. BabyCenter Community (https://community.babycenter.com/)

BabyCenter Community is a well-established forum with predefined topics of discussion regarding pregnancy, parenting, child development and needs of parents and their offspring. It is mostly a UK/USA based forum where most of the resources shared are also from.

Advantages:

- -Structured & Easy to Navigate: The forum is well-organized into predefined categories, making it easy to find discussions on pregnancy, parenting, and child development.
- -Established & Trusted Resource: BabyCenter has been a go-to platform for parents for years, offering reliable advice and community support.
- -Expert-Reviewed Content: Some discussions are supplemented with professional articles and expert insights, providing more credibility.
- -Supportive Environment: Many parents find a sense of community and reassurance from interacting with others who have similar experiences.
- -Long-Term Archives: Unlike social media, forum posts remain accessible for years, allowing parents to revisit helpful discussions anytime.

Disadvantages:

- -Geographically Focused: Since most users are from the UK and USA, some advice and resources may not be relevant for parents in other regions.
- -Slower Response Times: While discussions are active, they may not receive immediate responses, especially in less popular topics.
- -Culturally Limited Perspectives: Parenting styles and advice often align with Western norms, which may not be universally applicable.
- -Presence of Ads & Sponsored Content: The platform includes advertisements and brand-sponsored content, which can sometimes make it feel commercialized.
- -Restricted Discussion Flexibility: While the forum covers many parenting topics, predefined categories might limit the ability to start open-ended or unconventional discussions.



Figure 2. Picture of the BabuCenter Community website

3. Parenting StackExchange (https://parenting.stackexchange.com/)

Parenting StackExchange is part of the network community of StackExchange focused solely on topics of Parenting. More specifically, it is a Q&A-based platform where parents ask a specific question and get expert or peer answers.

Advantages:

- -High-Quality Answers: The platform follows a Q&A format with upvoting, meaning the most useful and well-explained answers rise to the top.
- -Expert and Peer-Reviewed Input: Many responses are detailed, well-researched, and sometimes backed by professional insights, making the advice more reliable.
- -Structured & Searchable: Questions are clearly categorized, and past discussions remain accessible, making it easy to find previously answered topics.
- -Minimal Distractions: Unlike social media-based platforms, there are no ads, personal updates, or off-topic discussions—just focused Q&A.
- -Community Moderation: The platform is well-moderated, reducing misinformation and maintaining a respectful discussion environment.

Disadvantages:

- -Strict Question Format: Users must ask clear, specific questions, which might be restrictive for open-ended discussions or emotional support.
- -Not as Social: Unlike forums or social media groups, there's less room for casual conversations or personal connection-building between parents.
- -Can Feel Intimidating for New Users: The StackExchange system has rules for asking and answering, and newcomers might struggle with formatting questions properly.

- -Less Immediate Interaction: Since the platform is more structured, responses may take longer compared to real-time discussions on apps or forums.
- -Limited Personal Experiences: Answers often focus on factual correctness rather than emotional support, which might not always be what a parent is looking for.

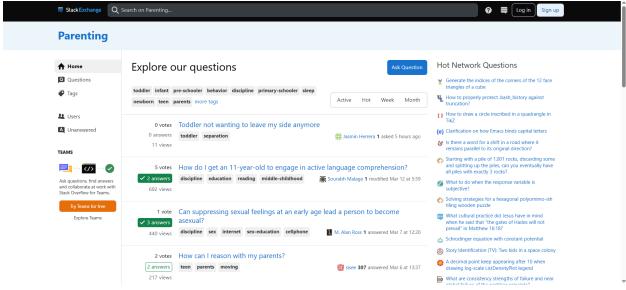
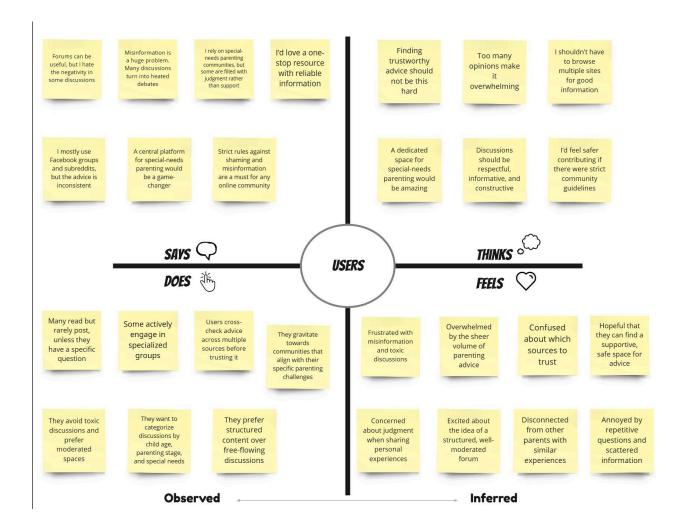


Figure 3. Picture of the StackExchange Parenting community

4. Define and Ideate

Key points from MIRO map

- 1. Users want a structured, well-moderated, and trustworthy platform where they can find expert-backed and experience-based advice while avoiding negativity and misinformation.
- 2. Users want clarity, organization, and safety when engaging in online discussions. A single, go-to platform for parenting information would be ideal.
- 3. Users prefer reading over posting, but they engage more in structured environments. They fact-check information and seek categorization for ease of use.
- 4. Users feel frustrated and overwhelmed but would trust a well-structured, welcoming community that offers clear, reliable information.



Identify User Needs and Insights

User Needs

From the interviews and empathy map, users need the following:

A Reliable and Well-Moderated Community

- Need a safe space to discuss parenting challenges without judgment or misinformation.
- Need moderation tools to prevent toxicity, shaming, and misinformation.

Clear, Organized, and Structured Information

- Need a centralized platform instead of browsing multiple sites for advice.
- Need categorized discussions by age, parenting phase, and special needs.
- Need an FAQ or expert-verified section to avoid repetitive questions.

Expert-Backed and Experience-Based Advice

- Need a way to distinguish between expert advice and personal experiences.
- Need verified sources and professional insights in addition to community input.

Inclusive Features for Different User Groups

- Need accessibility for computer-illiterate users with a simple UI.
- Need features for parents of children with special needs (e.g., sensory-friendly resources).
- Need an anonymous posting option to help users share experiences without fear of judgment.

Interactive and Personalized Features

- Need features like upvoting, bookmarking, and personalized recommendations to surface helpful advice.
- Need a way to connect with parents based on similar experiences (e.g., special-needs support, first-time parents, grandparents raising children).

Design Insights

- Moderation and Guidelines Matter A forum without clear rules will likely suffer from misinformation and negativity. Strong moderation tools and community guidelines are essential.
- Users Prefer Structured Content A free-flowing discussion space isn't enough. Clear categories, expert-backed sections, and featured FAQs will improve usability.
- Accessibility is Key Some users may not be tech-savvy, so a clean, intuitive design with simple navigation is necessary.
- Balance Between Expert and Community Input Users trust both professional advice and peer experiences. A hybrid model where experts verify key discussions could boost credibility.
- Engagement Features Can Improve Retention Upvoting, bookmarking, and recommendations help users find and save useful content, improving their overall experience.