Graduation Research
CSCI 4108

Review Related Works

Reminder – Group Formation

1st Semester

2nd / summer Semester

Graduation Research CSCI4108

- Form Group, choose a topic & a supervisor.
- Project Proposal report: Abstract, Introduction, Problem Statement, Related Works, ….

Graduation Research CSCI4208

- Same Group, topic & supervisor.
- Implement Project + write "Graduation Report" (same as proposal + additional chapters and sections).

How to find related works for a capstone project in the field if IT?

1. Define Your Research Question or Topic: Clearly articulate the research question or topic that your capstone project will address. This will help you focus your literature search.

2. Identify Key Concepts and Keywords: Break down your research question into key concepts and keywords. These are the terms and phrases that you will use to search for relevant literature.

3. Use Google Search Engine

4. Use Academic Search Engines and Databases such as Google Scholars

5. Use Local databases for previous capstone projects

How to find related works for a capstone project in the field if IT?

6. Boolean Operators and Advanced Search Techniques:
   - Learn how to use Boolean operators (AND, OR, NOT) to combine keywords for more precise searches.
   - Explore advanced search options provided by these databases, such as filtering by publication date or document type.

7. Read Abstracts and Extract Relevant works: Scan the abstracts of the search results to identify papers that are directly related to your topic.

8. Citation Searching: Once you find a relevant project reports, check its list of references (bibliography) to discover other works that may be relevant to your project.

9. Organize and Manage Your References

10. Evaluate the Quality of Sources: Assess the credibility and reliability of the sources you find. Consider factors like the reputation of the journal or conference and the expertise of the authors.
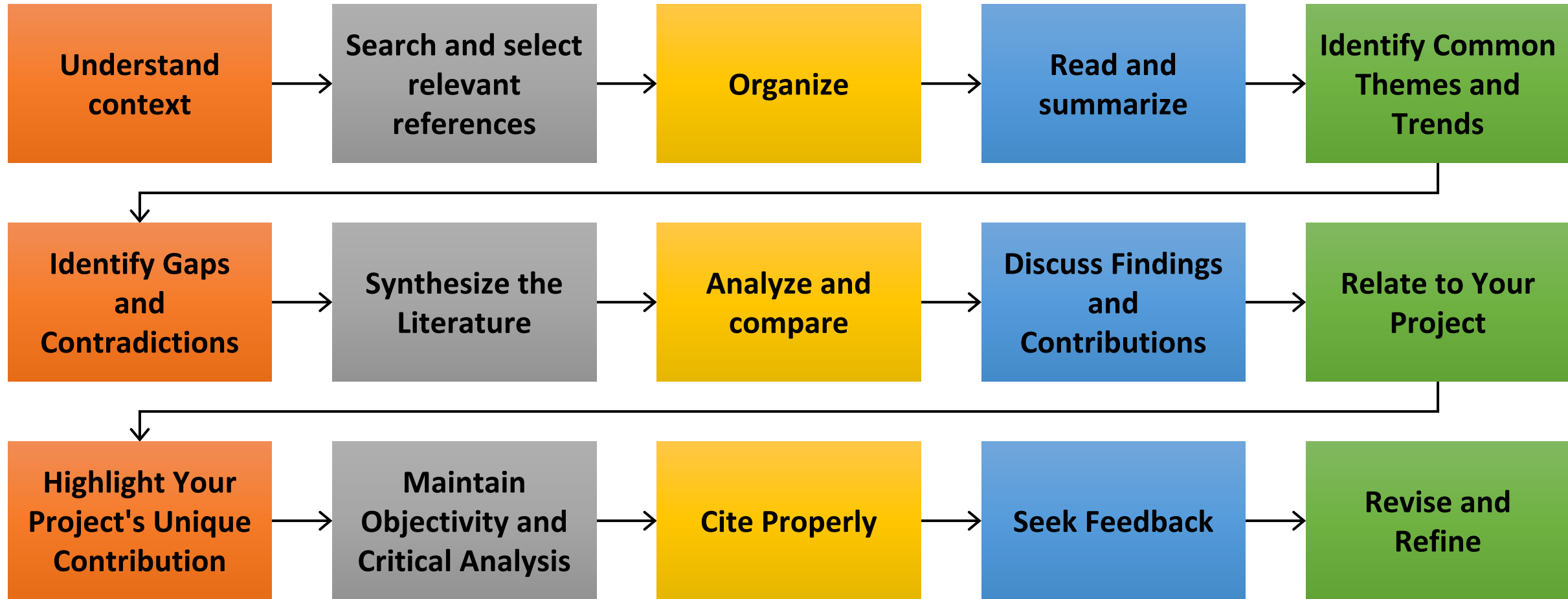
11. Seek Guidance and Feedback

Review & Analyze related works

- After gathering a collection of relevant works, synthesize and analyze the literature to identify common themes, trends, gaps, and areas where your project can contribute.

Synthesizing, analyzing and review related works

- Synthesizing, analyzing, and reviewing related works in a literature review for your capstone project is a critical task that helps you make sense of existing research in your field and identify gaps or areas where your project can contribute

Steps to review related works

Steps

1. Understand the Context (broad and narrow context)

2. For each reference, read the title, if it is relevant, read the abstract, if it is relevant, the consider the reference as a related work.

3. Organize Your Sources: Organize the sources you've collected into categories or themes. Create folders or labels for each category.

Steps

4. Read and Summarize Each work: read it carefully and take detailed notes. Summarize the key points, methodologies, findings, and contributions of each work.

5. Identify Common Themes and Trends: Look for common themes, trends, and patterns across the sources you've reviewed. Are there recurring ideas, theories, or methodologies that are relevant to your project?

Steps

6. Identify Gaps and Contradictions: Pay attention to gaps or areas where the existing literature does not adequately address your research question or where there are conflicting findings. These gaps can be opportunities for your project to make a contribution.

7. Synthesize the Literature: Synthesize the information from your sources by connecting the dots between different studies and concepts. Explain how various pieces of research are related and how they contribute to the understanding of your topic.

Steps

8. Analyze and compare : Analyze and compare the methodologies and approaches used in the literature. Assess their strengths and weaknesses. Consider which methods are most relevant to your project.

9. Discuss Findings and Contributions: Discuss the findings and contributions of the studies you've reviewed. How do they contribute to the current state of knowledge in your field, and what insights can you draw from them?

Steps

10. Relate to Your Project: Relate the findings and insights from the literature to your capstone project. Explain how the existing research informs your project's goals and objectives.

11. Highlight Your Project's Unique Contribution: Clearly articulate how your capstone project fills gaps, extends existing research, or offers a novel perspective on the topic. Highlight the unique contribution your project will make.

Steps

12. Maintain Objectivity and Critical Analysis: Maintain objectivity in your analysis. Acknowledge limitations and potential biases in the literature, and be critical in your evaluation of the quality and relevance of each source.

13. Cite Properly: Ensure that you properly cite all sources you reference in your literature review. Follow the citation style required by your institution or program.

Steps

14. Seek Feedback: Share your literature review with your project advisor and seek their feedback. They can provide valuable insights and help you refine your analysis.

15. Revise and Refine: After receiving feedback, revise and refine your literature review as needed to ensure clarity, coherence, and alignment with your capstone project's objectives