## **Boolean Searching Task Analysis**

For an example, please see https://libguides.mit.edu/c.php?g=175963&p=1158594

## List of Tasks:

- 1. Introduction of Boolean
  - 1.1 What Boolean is
  - 1.2 How Boolean is used in searching
- 2. Introduction of various Boolean Operators
  - 2.1. AND
    - 2.1.1. Indication of what the AND operator does to our searching
    - 2.1.2. Example of using AND
  - 2.2. OR
    - 2.2.1. Indication of what the OR operator does to our searching
    - 2.2.2. Example of using OR
  - 2.3. NOT
    - 2.3.1. Indication of what the NOT operator does to our searching
    - 2.3.2. Example of using NOT

## Breakdown of Tasks:

Module	Specific Task	Assessment
1 Main topic	Introduction of Boolean	
1.1 Subtopic (Level 2 heading)	Why we use Boolean in searching	We use Boolean searching to link similar terms/concepts/ideas. Instruct the search tool what to search for.
1.2 Subtonic (Lavel 2	How people use Roolean	
1.2 Subtopic (Level 2 heading)	How people use Boolean everyday informally	Think about what you would like to order from a fast food restaurant.  We are interested in a main part of a meal, a side, and a drink.  For the drink  Water  Cola  Gingerale  Rootbeer  Orange Juice  Milk  For the side  Salad  French Fries  Onion rings  Sweet potato fries  For the main  Burger  Chicken Burger  Veggie Burger  Toppings for main  Mustard  Tomato Ketchup  Cheese  Hot Peppers  Relish  Tomato slices
		Raw onions  Think of all of the different combinations we could get. Drinks, including nothing, there are seven options. Sides, including nothing,

2 Main topic (Level 1	Boolean operators	Main, including nothing there are three options Toppings, including nothing there are eight options So, with the various options there could be over 800 combinations. However, we want to walk away with one meal reflecting what we would like to eat today.
heading)	Boolean operators	
2.1 Subtopic (Level 2 heading)	AND	Why would we use this term Use "AND" to combine your concepts in a search statement AND searches for both words together
2.1.1 Sub-subtopic (Level 3 heading)	How does the AND operator affect our results	How does the use of this term change our results  AND narrows your search and tells search tool that both concepts must appear in the results  For example, we want something from each category (drink, side, main with toppings).
2.2 Subtania (Laval 2	OD	When would we was this town
2.2 Subtopic (Level 2 heading)	OR	Why would we use this term in our food selection. Use "OR" to combine your synonyms or similar terms OR searches for either of the words (synonyms and/or similar/related terms)
2.2.1 Sub-subtopic (Level 3 heading)	How does the OR operator affect our results	How does the use of this term change our results  OR broadens your search and tells the search tool that either concepts may appear in the results

		In the case of drinks, we have several options. If we do not care what we get, it could be any of the options.  Water OR Cola OR Gingerale OR Rootbeer OR Orange Juice OR Milk OR nothing
2.3 Subtopic (Level 2 heading)	NOT	Use "NOT" to exclude certain words from your search
2.3.1 Sub-subtopic (Level 3 heading)	How does the NOT operator affect our results	How does the use of this term change our results  NOT really narrows your search.  We want tomato slices, but not ketchup on our burger, we would use NOT to specify tomato NOT ketchup to get only tomato slices on the burger. Be careful with NOT! If you want tomato ketchup on your burger, but not tomato slices, using NOT tomato would eliminate both tomato slices and tomato ketchup.
2.3.2 Sub-subtopic (Level 3 heading)	How does the NOT operator affect our results	Why would we use this term In our example above, if we have a food allergy, we would want to make sure it is not part of our meal (for example, if we have severe lactose issues you might even need to avoid the bun around our main).
2.3.3 Sub-subtopic (Level 3 heading)	Some potential dangers of the NOT operator	NOT is very powerful. With full-text searching especially NOT could exclude relevant content that only casually includes the terms you have excluded