

1 DOMAIN

Our ontology wishes to explore the domain of western dress codes and the way in which they govern outfits. Dress codes are written, and more often, unwritten sets of rules that regulate the types of clothing and the specifications of the clothing to be worn to different occasions and events. A classification of these codes is normally made for varying levels of formality of the occasion and times of day the event is held.

Western dress codes, albeit a by-product of Western Culture (which in itself can be perceived as very diverse), will be assumed to relate to the rather sweeping notion of western dress that permeates much of the world today.

As previously mentioned dress codes encompass many unwritten rules. These unwritten rules result from the influences on dress codes by societal norms of the respective time period. We will assume that the dress codes being codified in our axioms are more or less pertinent to present day but acknowledge the chance for their possible antiquity. Some notable instances of arguable rules of dress include the distinction between formal and semi-formal wear and the level of formality of a dress and skirt's hem length.

To exercise the effectiveness of our ontology and to accommodate certain use-cases, our ontology will include a brief selection of occasion instances which will be designated specifically one formality. How certain events and occasions are perceived for their formality is greatly influenced by the cultural norms of the persons hosting the event (which deems worthy an ontology in itself). Therefore, event instances included in our ontology will be extremely general and absent of any cultural specificity.

A distinction must be made between a dress code and what is fashionable. We acknowledge that elements of fashion of any time period do affect a dress code. However, we will largely ignore the elements of an item of clothing that may or may not be fashionable present day. Therefore we will only address rules of dress that go as far as what can be said has been a fashion constant of the past several decades e.g. A dark colored/neutral colored men's suit and it's formality dependent variations have more or less been the norm for men for events ranging from informal to formal for the past several decades.

2 MOTIVATING SCENARIOS

The motivating scenario for the development of the ecommerce outfit assembly ontology is to provide a software agent the knowledge required to assemble acceptable outfits for different events and occasions from clothing available through online product catalogues. Via the ontology a software agent could discern between clothing items in a product catalogue on characteristics of formality and targeted gender. The aggregated product information can subsequently be interpreted to build product sets that form complete and logical outfit selections that match the requirements of the user of the software agent.

The ontology can be extended with other ecommerce ontologies to allow a software agent to pair product catalogue selections with details of product availability (in size), costs and the proximity of origin of shipment of the clothing articles. This would be done for the purposes of building outfit selections that match the customers requirements in size, style, fastest and/or cheapest shipping options, all within his or her specified budget.

2.1 USE CASE 1

A female person receives an invite to a charity ball dinner and would like to search her favorite ecommerce clothing websites to know what are her clothing options available for purchase that she can wear in attendance to the function.

2.2 USE CASE 2

A male diplomat is attending a state dinner and would like to know what are his clothing options and what is the nearest clothing store that sells the required garments to complete the outfit.

2.3 USE CASE 3

A female person has a wardrobe of dresses and skirts she can wear to her first day at work in the downtown bank tower. She is most likely to be introduced to a number of her coworkers and attend a meeting. She wants to know which dresses or skirts are acceptable options that can be included in a business appropriate outfit for the occasion.

2.4 USE CASE 4

The same woman from Use Case 3 realizes that her current wardrobe offers a limited number of clothing options to be worn to work. She fears she won't get through the week without having to wear some outfits to work a second time. She searches her favorite online retailers for new garments that can be purchased to fill the gap that match her requirements.

3 INFORMAL COMPETENCY QUESTIONS

There is a consistent pattern to the types of questions of which the use cases present and the ontology would like to resolve.

1. What is the implied formality of a specified occasion and what type of clothing conform to the rules of the dress code associated with the respective formality of the event and the gender of the person?
 - 1.1. Is an evening gown suitable to a casual dinner party in one is a woman?
 - 1.2. If one is a man, is a tuxedo appropriate when attending the wedding of your best business client's son?
 - 1.3. Is a business suit appropriate when attending a state dinner if a man?
2. Given a selection of clothing, are there rules on how the items of clothing must be paired together governed by the dress code?
 - 2.1. Can the articles of a men's semi-formal suit consist of pieces sewn from different fabrics?
 - 2.2. Can both a a dress and a blouse considered business attire on their own be worn together in the same informal outfit?
3. Given a set of options of clothing by type, what are some unique restrictions on specific types of clothing that would govern their acceptance at a formal occasion, a semiformal occasion or an informal occasion?
 - 3.1. What are the hem lengths acceptable for a woman's dress when attending a formal function.
 - 3.2. What are the hem lengths acceptable for a woman's skirt when worn as a skirt suit when going to work in a traditional office.
 - 3.3. What are the color options for a man's suit at an informal occasion.

Albeit not directly stated in the use cases, there are a number of questions that can be extended from those listed above.

1. What is the absolute minimum required types of clothing to complete any outfit?
2. What parts of the body must be covered to consider an outfit complete?
3. Which types of clothes cover which parts of the body?
4. How and in what sequence are certain types of clothes worn when worn together?