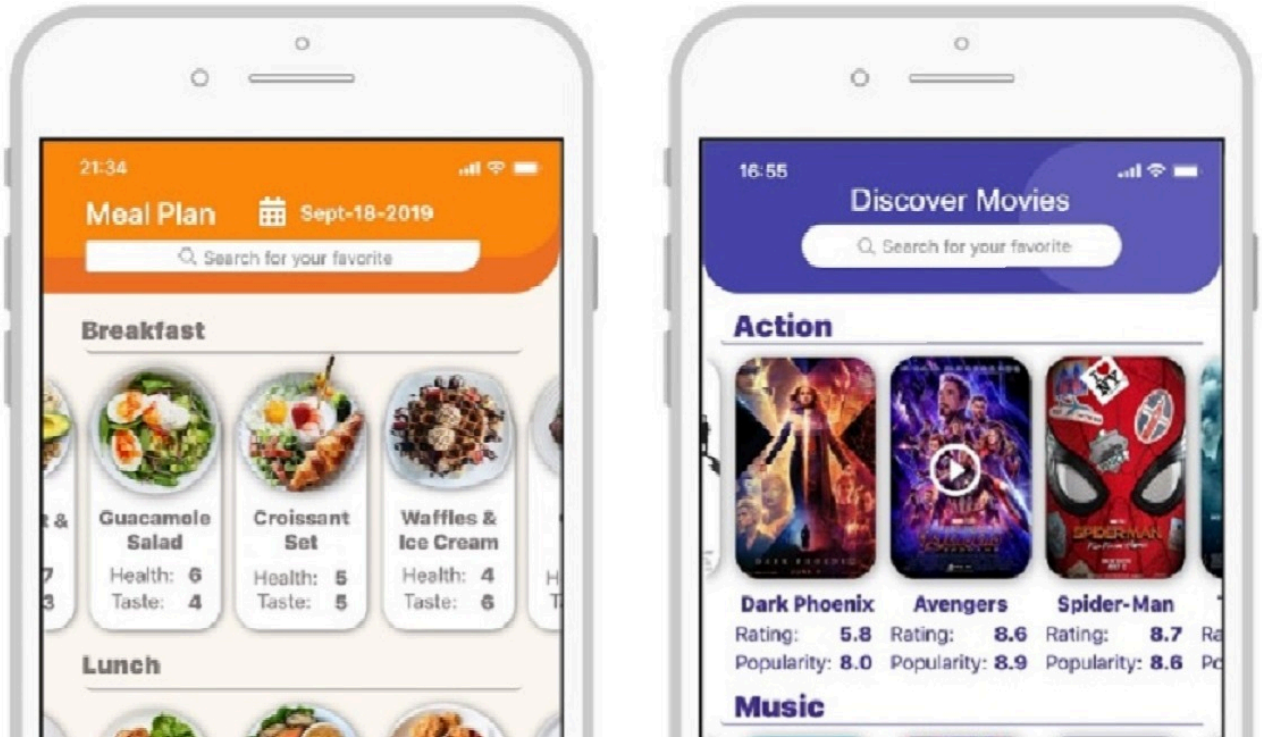
TECH OFFER

Enabling Interpretable Sorting Of Items By Multiple Attributes



KEY INFORMATION

TECHNOLOGY CATEGORY:
Infocomm - eCommerce & ePayment
Infocomm - Enterprise & Productivity

TECHNOLOGY READINESS LEVEL (TRL): TRL6
COUNTRY: SINGAPORE
ID NUMBER: TO174363

OVERVIEW

Lists are an indispensable part of the online experience, often used to show many results, such as products, web pages, and food dishes. These items can be neatly sorted by a desired attribute like price, relevance, or healthiness.

Listed items often have multiple attributes. However, instead of being able to sort multiple attributes simultaneously, consumers are currently limited to sorting only one attribute at a time. This makes searching for the desired item tedious and confusing.

Imma Sort supports interpretable and multi-attribute sorting. Sorting for two or more attributes is possible. In contrast to existing search technology, Imma Sort trades off the smoothness of the sorted trend for the main attribute to increase ease of prediction for other attributes, by sorting them more approximately. Results for specific attributes can be made smoother by setting higher importance weights.

TECHNOLOGY FEATURES & SPECIFICATIONS

- Provides intuitively sorted results sorted by two or more attributes to improve decision-making and user experience
- Results can be customised by allocating higher weightage for selected attributes
- Enables users to perform multi-attribute sorting in any existing list interface without requiring sophisticated spreadsheets or data visualisations
- Can be integrated into search and recommendation systems across a wide range of applications
- Can also be incorporated into various search and recommendation systems for more effective search results.

POTENTIAL APPLICATIONS

Examples of possible applications:

- Food dishes can be sorted by healthiness and tastiness
- Hotels can be sorted by price and distance

UNIQUE VALUE PROPOSITION

Sorting by price and rating would generate results that generally trend in one direction for both attributes. This makes it easy for users to anticipate the values of multiple attributes as they move down the list, without having to construct a mental list for the secondary attribute. By decreasing users' mental effort, this will improve decision-making and increase satisfaction.