Component Intercommunication JSON Specification

Tommy Lamb

December 11, 2017

Contents

1	Me	nu																		2
2	1.1	Menu Item																		4
	1.2	Menu Section	on .							•								•		,
	Ord	Order														;				
	2.1	Order Item															 			2

1 Menu

- The Menu object primarily consists of a tree of two other objects: Menu Items and Menu Sections
- MenuID is the globally unique identifier for this menu object
- DisplayName is the string to be used if representing the object to a user
- Sections is a list of the top-level MenuSection objects that comprises this menu object. Examples may include MenuSection objects representing Starters, Mains, Deserts, or Drinks.

```
Menu : {
         "MenuID" : int,
         "DisplayName" : string,
         "Sections" : [MenuSection, MenuSection, ...]
}
```

1.1 Menu Item

- Represents any single 'thing' that can be ordered by a customer.
- The ItemID is a globably unique identifier for the specific item.
- ParentSectionID is the globally unique identifier for the menu section under which this item is listed.
- DisplayName is the string to be used if representing the object to a user
- Description is a textual description of the object, eg *Decadent chocolate* Bombe glacée drizzled with toffee sauce and served with black forest fruit compote.
- Price is the decimal value representing the price of the item to the customer ordering.

```
MenuItem : {
    "ItemID" : int,
    "ParentSectionID" : int,
    "DisplayName" : string,
    "Description" : string,
    "Price" : decimal
}
```

1.2 Menu Section

- Represents a section of the menu, which may contain either a number of subsections, or a number of menu items.
- ParentSectionID is the globally unique identifier for the menu section under which this section is listed.
- ParentSectionID may be null if the section is a top-level element. That is, child only to the Menu object.
- GroupColour is a string containing a colour hex code, eg "#FFFFFF"
- HasItems represents whether the section has items (true) or subsections (false).
- Behaviour where both Items and Subsections are not null is as yet undefined.

```
MenuSection : {
          "SectionID" : int,
          "ParentSectionID" : int,
          "DisplayName" : string,
          "GroupColour" : string,
          "HasItems" : Boolean,
          "Items" : [MenuItem, MenuItem, ...],
          "Subsections" : [MenuSection, MenuSection, ...]
}
```

2 Order

- Represents an order as placed by a customer (by any means).
- OrderNumber is a number that can be used to geographically locate the customer and/or to group orders entered separately. For example, a table number. For grouping separate orders, this allows orders to be placed separately

for grouping separate orders, this allows orders to be placed separately from a group of people, but have those orders conceptually grouped in the system to allow better customer service (eg have all orders prepared at the same time).

• Items is the list of OrderItem objects that this order consists of.

• ETA is either the string HH:MM representing the estimated time of completion for the order, or null if no such estimate exists.

```
Order : {
         "OrderNumber" : int,
         "OrderName" : string,
         "ETA" : string | null,
         "Items" : [OrderItem, OrderItem, ...],
}
```

2.1 Order Item

- Represents a single type of MenuItem ordered by a customer.
- Amount is the non-zero integer representing how many of the MenuItem the customer has ordered.
- Request is a potentially empty string which represents any specific requests or choices made by the customer (as under F-UR-1.4 and related Non-Functional requirements)
- MenuItem is the JSON object specified above representing the thing being ordered.
- ETA is either the string HH:MM representing the estimated time of completion for this item, or null if no such estimate exists.
- The Modified flag must be specified if the Order object is being used in the context of updating the details of an order.

```
OrderItem : {
        "Amount" : int,
        "Request" : string,
        "MenuItem" : MenuItem,
        "ETA" : string | null,
        ["Modified" : Bool]
}
```