Schema.org Reservations Proposal

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Overview

This proposal includes new types for describing reservations and tickets.

A generalized Reservation type described, as well as sub-types for flight, train, bus, car, restaurant, event and hotel reservations.

An additional type ReservationPackage is also proposed, which should be used to group complex reservations (e.g. flights with multiple legs, itineraries with a flight and a hotel) under a single item.

General Reservation Schemas

Thing > Reservation

Describes a generic reservation. Some reservations may have a ticket information.

Name	Type	Description
reservationNumber	Text	The number, code or id of the reservation.
reservationStatus	ReservationStatus	Current status of the reservation.
reservationFor	Thing	The thing -- book, restaurant, movie, event, flight, etc. -- the reservation is for.
underName	Person or Organization	The Person or organization the reservation is for.
provider	Organization	The organization providing the reservation.
creator	Person	The Person / organization that made the reservation.
bookingAgent	Organization or Person	Who made the reservation.
bookingDate	DateTime	Date the reservation was made.
bookingTime	DateTime	Date the reservation was made.
programMembership	ProgramMembership	Any membership in a frequent flyer, hotel

		loyalty program, etc. being applied to the reservation.
dateModified	DateTime	Time the reservation was last modified.
modifiedTime	DateTime	Time the reservation was last modified.
confirmReservationUrl	URL	Web page where reservation can be confirmed.
cancelReservationUrl	URL	Web page where reservation can be cancelled.
modifyReservationUrl	URL	Web page where reservation can be modified.
checkinUrl	URL	Webpage where the passenger can check in.
numSeats	Text	Number of seats if unreserved seating.
seat	Seat	Seating information.
ticket	Ticket	Ticket information.
price	Text	Total price of the Reservation.
priceCurrency	Text	The currency (in 3-letter ISO 4217 format) of the Reservation's price.

Thing > Enumeration > ReservationStatus

Enumeration for describing a reservation state.

Value
Pending
Confirmed
Cancelled
Hold

Thing > ProgramMembership

Used to describe membership in a loyalty programs (e.g. "StarAliance"), traveler clubs (e.g. "AAA"), purchase clubs ("Safeway Club"), etc.

Name	Type	Description
membershipNumber	Text	The identifier of the membership
member	Person	The individual with the membership
program	Text	The program providing the membership

Thing > Ticket
Used to describe a ticket to an event, a flight, a bus ride, etc.

Name	Type	Description
underName	Person or Organization	The Person or organization the ticket is for.
ticketFor	Thing	The thing the ticket is for: an Event, a Reservation, a Flight, etc.
issuedBy	Organization	The organization providing the ticket.
dateIssued	DateTime	Time the ticket was issued.
numSeats	Text	Number of seats if unreserved seating.
seat	Seat	The location of the reserved seat (e.g., 27B).
ticketNumber	Text	The number or id of the ticket.
ticketToken	Text or URL	Reference to an asset (e.g., Barcode, QR code image or PDF) usable for entrance.
downloadUrl	URL	.
printUrl	URL	.
price	Text	Total price of the ticket.
priceCurrency	Text	The currency (in 3-letter ISO 4217 format) of the ticket's price.

Thing > Seat
Used to describe a seat, such as a reserved seat in an event reservation.

Name	Type	Description

seatNumber	Text	The location of the reserved seat (e.g., 27).
row	Text	The row location of the reserved seat (e.g., B).
section	Text	The section location of the reserved seat (e.g. Orchestra).
seatingType	Text	The type/class of the seat.

Thing > Reservation > ReservationPackage

Used to group multiple reservations together and centralized common values for all sub-reservations.

Name	Type	Description
reservation	Reservation	The individual reservations included in the package. Typically a repeated property.

Example

Flight from NY to San Francisco with a leg in Chicago + a hotel in San Franisco

```
<div itemscope itemtype="http://schema.org/ReservationPackage">
 <link itemprop="url" href="http://travel123.com/myreservations/xyz456"/>
 <span itemprop="reservationNumber">xyz456</span>
 <div itemprop="underName" itemscope itemtype="http://schema.org/Person">
  <span itemprop="name">John Smith</span>
 </div>
 <div itemprop="reservation" itemscope itemtype="http://schema.org/FlightReservation">
  <div itemprop="reservationFor" itemscope itemtype="http://schema.org/Flight">
   <span itemprop="flightNumber">110</span>
   <span itemprop="airline">United</span>
   <span itemprop="departureAirport">JFK</span>
   <span itemprop="departureTime">2013-03-04 11:00 -5</span>
   <span itemprop="arrivalAirport">ORD</span>
   <span itemprop="arrivalTime">2013-03-05 13:25 -6</span>
  </div>
 </div>
 <div itemprop="reservation" itemscope itemtype="http://schema.org/FlightReservation">
  <div itemprop="reservationFor" itemscope itemtype="http://schema.org/Flight">
   <span itemprop="flightNumber">110</span>
   <span itemprop="airline">United</span>
   <span itemprop="departureAirport">ORD</span>
   <span itemprop="departureTime">2013-03-05 14:55 -6</span>
   <span itemprop="arrivalAirport">SFO</span>
   <span itemprop="arrivalTime">2013-03-05 15:15 -8</span>
  </div>
```

```
  </div>
  <div itemprop="reservation" itemscope itemtype="http://schema.org/LodgingReservation">
    <div itemprop="reservationFor" itemscope itemtype="http://schema.org/LodgingBusiness">
      <span itemprop="name">Hilton San Francisco</span>
    </div>
    <span itemprop="checkinTime">2013-03-05</span>
    <span itemprop="checkoutTime">2013-03-07</span>
  </div>
</div>
```

Event Reservations

Thing > Reservation > EventReservation

Name	Type	Description
reservationFor	Event	The event the reservation is for.

Example

Minimal Event Reservation example:

```
<div itemscope itemtype="http://schema.org/EventReservation">
 <span itemprop="reservationNumber">abc123</span>
 <div itemprop="reservationFor" itemscope itemtype="http://schema.org/Event">
   <span itemprop="name">Foo Fighters Concert</span>
   <div itemprop="performer" itemscope itemtype="http://schema.org/Person">
     <span itemprop="name">The Foo Fighters</span>
   </div>
   <span itemprop="startDate">2013-03-06 19:30 PST</span>
   <div itemprop="location" itemscope itemtype="http://schema.org/PostalAddress">
     <span itemprop="name">AT&T Park</span>
     <span itemprop="streetAddress">24 Willie Mays Plaza</span>
     <span itemprop="addressLocality">San Francisco</span>
     <span itemprop="addressRegion">CA</span>
     <span itemprop="addressCountry">US</span>
     <span itemprop="postalCode">94107</span>
   </div>
 </div>
 <div itemprop="underName" itemscope itemtype="http://schema.org/Person">
   <span itemprop="name">John Smith</span>
 </div>
</div>
```

Example

Example for an EventReservation which includes ticket and seating information.

```
<div itemscope itemtype="http://schema.org/EventReservation">
 <span itemprop="reservationNumber">abc123</span>
 <div itemprop="underName" itemscope itemtype="http://schema.org/Person">
  <span itemprop="name">John Smith</span>
 </div>
 <div itemprop="reservationFor" itemscope itemtype="http://schema.org/Event">
  <span itemprop="name">Foo Fighters Concert</span>
  <div itemprop="performer" itemscope itemtype="http://schema.org/Person">
   <span itemprop="name">The Foo Fighters</span>
  </div>
  <span itemprop="startDate">2013-03-06 19:30 PST</span>
  <div itemprop="location" itemscope itemtype="http://schema.org/PostalAddress">
   <span itemprop="name">AT&T Park</span>
   <span itemprop="streetAddress">24 Willie Mays Plaza</span>
   <span itemprop="addressLocality">San Francisco</span>
   <span itemprop="addressRegion">CA</span>
   <span itemprop="addressCountry">US</span>
   <span itemprop="postalCode">94107</span>
  </div>
 </div>
 <div itemscope itemtype="http://schema.org/Ticket">
  <link itemprop="downloadUrl" href="http://tickets.org/ticket/id=abc123"/>
  <span itemprop="ticketToken">cid:abc123</span>
  <div itemscope itemtype="http://schema.org/Seat">
   <span itemprop="seatNumber">14</span>
   <span itemprop="row">F</span>
   <span itemprop="section">Orchestra</span>
   <span itemprop="seatingType">ReservedSeating</span>
  </div>
 </div>
</div>
```

Flight Reservations

Thing > Reservation > FlightReservation

Name	Type	Description
reservationFor	Flight	The flight the reservation is for.
boardingGroup	Text	The airline-specific indicator of boarding order / preference.

Example

Flight reservation example.

```
<div itemscope itemtype="http://schema.org/FlightReservation">
 <span itemprop="reservationNumber">RXJ34P</span>
 <div itemprop="underName" itemscope itemtype="http://schema.org/Person">
  <span itemprop="name">John Smith</span>
 </div>
 <div itemprop="reservationFor" itemscope itemtype="http://schema.org/Flight">
  <span itemprop="flightNumber">110</span>
  <span itemprop="airline">United</span>
  <span itemprop="departureAirport">SFO</span>
  <span itemprop="departureTime">2013-3-4 20:15 -5</span>
  <span itemprop="arrivalAirport">JFK</span>
  <span itemprop="arrivalTime">2013-3-5 6:30 -5</span>
 </div>
</div>
```

Thing > Flight

Name	Type	Description
flightNumber	Text	Flight identifier
airline	Text or Airline	The airline providing the flight (iata code)
operatedBy	Text or Airline	The airline operating the flight (iata code)
departureTime	Datetime	Expected time of departure
departureAirport	Text or Airport	The departure airport for the flight (iata code)
departureGate	Text	Identifier of the airport departure gate of the flight.
departureTerminal	Text	The airport terminal of the departureGate.
arrivalTime	Datetime	Expected time of arrival
arrivalAirport	Text or Airport	The final destination of the flight (iata code)
arrivalGate	Text	Identifier of the airport arrival gate of the flight.
arrivalTerminal	Text	The airport terminal of the arrivalGate.
aircraft	Text	The kind of aircraft (e.g., "Boeing 747")
mealService	Text	Description of the meals that will be provided or available for purchase.
duration	Text	How long the flight will take (e.g., "2h 34m")
distance	Text	How far the flight will travel (e.g, "2432 mi",

		"500 km")
webCheckinTime	Datetime	Earliest time for web checkin

Restaurant Reservations

Thing > Reservation > FoodEstablishmentReservation

Name	Type	Description
reservationFor	FoodEstablishment	The food establishment the reservation is for.
startTime	Datetime	Reservation date and time
partySize	Number	Number of people in the party

Example

Minimal restaurant reservation example

```
<div itemscope itemtype="http://schema.org/FoodEstablishmentReservation">
 <span itemprop="reservationNumber">ABC123</span>
 <div itemprop="reservationStatus" itemscope itemtype="http://schema.org/EventStatus">
 </div>
 <div itemprop="reservationFor" itemscope itemtype="http://schema.org/FoodEstablishment">
   <span itemprop="name">Wagamama</span>
 </div>
 <span itemprop="startTime">2013-04-10 8:00 EST</span>
 <div itemprop="underName" itemscope itemtype="http://schema.org/Person">
   <span itemprop="name">John Green</span>
 </div>
</div>
```

Train Reservations

Thing > Reservation > TrainReservation

Name	Type	Description
reservationFor	TrainTrip	The train trip the reservation is for.

Thing >TrainTrip

Name	Type	Description
trainNumber	Text	e.g. 9203.
trainName	Text	e.g. Orient Express.
trainCode	Text	e.g. iGTV.
trainCompany	Organization	e.g. Deusech Bahn (DB).
departureStation	TrainStation	e.g. Munich Central.
departurePlatform	Text	e.g. 64.
departureTime	DateTime	
arrivalStation	TrainStation	e.g. Paris Gare De Lyon.
arrivalPlatform	Text	e.g. 101.
arrivalTime	DateTime	

Bus Reservation

Thing > Resevation > BusReservation

Name	Type	Description
reservationFor	BusTrip	The bus trip this reservation is for.

Thing > BusTrip

Name	Type	Description
busNumber	Text	e.g. 101.
busName	Text	e.g. Bolt Express.
busCompany	Organization	e.g. Bolt NYC.
departureBusStop	BusStop or BusStation	E.g. King's Crossing.

departureTime	DateTime	.
arrivalBusStop	BusStop or BusStation	E.g. King's Crossing.
arrivalTime	DateTime	.

Rental Car Reservations

Thing > Reservation > RentalCarReservation
Extends Reservation

Name	Type	Description
reservationFor	RentalCar	The car rental the reservation is for.
pickupLocation	Place	Where the car is picked up.
pickupTime	DateTime	When the car is picked up.
dropoffLocation	Place	Where the car is returned.
dropoffTime	DateTime	When the car is returned.

Thing > Product > Car > RentalCar

Name	Type	Description
rentalCompany	Organization	The rental company, e.g. 'Hertz'.

Thing > Product > Car
No additional properties.

Hotel Reservations

Thing > Reservation >LodgingReservation

Name	Type	Description
reservationFor	LodgingBusiness	The lodging business the

		reservation is for.
checkinTime	Datetime	Checkin time.
checkoutTime	Datetime	Checkout time.
lodingUnitType	Text	Textual description of the unit type (including suite vs. room, size of bed, etc.)
numAdults	Number	Number of adults who will be staying in the lodging unit
numChildren	Number	Number of children who will be staying in the lodging unit
lodgingUnitDescription	Text	Full description of the room

Example

Minimal hotel reservation example:

```
<div itemscope itemtype="http://schema.org/LodgingReservation">
 <span itemprop="reservationNumber">xyz456</span>
 <link itemprop="url" href="http://travel123.com/myreservations/xyz456"/>
 <div itemprop="underName" itemscope itemtype="http://schema.org/Person">
   <span itemprop="name">John Smith</span>
 </div>
 <div itemprop="reservationFor" itemscope itemtype="http://schema.org/LodgingBusiness">
   <span itemprop="name">Hilton San Francisco</span>
 </div>
 <span itemprop="checkinTime">2013-4-11</span>
 <span itemprop="checkoutTime">2013-4-13</span>
</div>
```