

# System Design - CSCC01 Sprint 1

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## Changes

### CRC Cards

- 1) Added variables and methods to MainController
- 2) Added variables and methods to Itinerary
- 3) Added variables and methods to ItineraryItem
- 4) Added variables and methods to Event
- 5) Added variables and methods to Transportation
- 6) Added variables and methods to User
- 7) Added variables and methods to GoogleMaps
- 8) Added Time card

### System Design

- 1) Changed database from SQL to MongoDB

## CRC Cards

MainController	
<ul style="list-style-type: none"><li>• Can get an itinerary</li><li>• Can view an itinerary</li><li>• Can add an event to an itinerary</li><li>• Can edit the time of an event</li><li>• Can edit the location of an itinerary</li><li>• Can change the budget for an itinerary</li><li>• Can change the radius for an itinerary</li><li>• Can change the transportation type(s) for an itinerary</li><li>• Can log in a user</li><li>• Can register a user</li></ul>	<ul style="list-style-type: none"><li>• Itinerary</li><li>• GoogleMaps</li><li>• User</li></ul>

## CRC Cards

Itinerary	
<ul style="list-style-type: none"><li>• Knows its start time</li><li>• Knows its end time</li><li>• Knows its home</li><li>• Knows its location</li><li>• Knows its maximum distance</li><li>• Knows its activities</li><li>• Knows its budget</li><li>• Knows its schedule</li><li>• Knows its visited events</li><li>• Knows its method of transportation</li><li>• Can get the next event in the schedule</li><li>• Can get its schedule</li><li>• Can get its start time</li><li>• Can get its end time</li><li>• Can get its home</li><li>• Can get its location</li><li>• Can get its maximum distance</li><li>• Can get its activities</li><li>• Can get its budget</li><li>• Can set its start time</li><li>• Can set its end time</li><li>• Can set its home</li><li>• Can set its location</li><li>• Can set its maximum distance</li><li>• Can set its activities</li><li>• Can set its budget</li><li>• Can set its schedule</li><li>• Can set its method of transportation</li><li>• Can get its visited events</li><li>• Can get its method of transportation</li><li>• Can get the amount remaining in the budget</li><li>• Can get its current time</li><li>• Can get the remaining distance</li><li>• Can add an event</li><li>• Can delete an event</li></ul>	<ul style="list-style-type: none"><li>• GoogleMaps</li><li>• ItineraryItem</li></ul>

## CRC Cards

ItineraryItem	
Transportation, Event	
<ul style="list-style-type: none"><li>• Knows its type</li><li>• Knows its title</li><li>• Knows its price</li><li>• Knows its start time</li><li>• Knows its end time</li><li>• Knows its expected length</li><li>• Can get its type</li><li>• Can get its title</li><li>• Can get its price</li><li>• Can get its start time</li><li>• Can get its end time</li><li>• Can get its expected length</li><li>• Can set its type</li><li>• Can set its title</li><li>• Can set its price</li><li>• Can set its start time</li><li>• Can set its end time</li></ul>	

## CRC Cards

Event		ItineraryItem
<ul style="list-style-type: none"><li>• Knows its location</li><li>• Knows its activity</li><li>• Knows its rating</li><li>• Knows its image</li><li>• Knows its description</li><li>• Knows its id</li><li>• Can get its location</li><li>• Can get its activity</li><li>• Can get its rating</li><li>• Can get its image</li><li>• Can get its description</li><li>• Can get its id</li><li>• Can set its location</li><li>• Can set its activity</li><li>• Can set its rating</li><li>• Can set its image</li><li>• Can set its description</li><li>• Can set its id</li><li>• Can calculate its score</li></ul>		

Transportation		ItineraryItem
<ul style="list-style-type: none"><li>• Knows its distance</li><li>• Knows its icon</li><li>• Knows its subtitle</li><li>• Can get its distance</li><li>• Can get its icon</li><li>• Can get its subtitle</li><li>• Can set its distance</li><li>• Can set its icon</li><li>• Can set its subtitle</li></ul>		

## CRC Cards

GoogleMaps	
<ul style="list-style-type: none"><li>• Knows its key</li><li>• Can get its transportation</li><li>• Can get its possible events</li><li>• Can filter events by price</li><li>• Can obtain a price level for an event</li><li>• Can get the time for an event</li><li>• Can get its visited events</li><li>• Can create an event</li><li>• Can get its key</li><li>• Can set its key</li></ul>	

User	
<ul style="list-style-type: none"><li>• Knows its username</li><li>• Knows its id</li><li>• Knows its visited events</li><li>• Knows its event ratings</li><li>• Knows its itinerary</li><li>• Can get an average rating for all events within a specific activity</li><li>• Can get a rating for a specific event</li><li>• Can get ratings for events</li><li>• Can set ratings for events</li><li>• Can check if an event has been visited</li><li>• Can get its username</li><li>• Can set its username</li><li>• Can get its itinerary</li></ul>	<ul style="list-style-type: none"><li>• Event</li><li>• ItineraryItem</li></ul>



## CRC Cards

Time	
<ul style="list-style-type: none"><li>• Knows its year</li><li>• Knows its month</li><li>• Knows its day</li><li>• Knows its hour</li><li>• Knows its minute</li><li>• Knows whether it is in the past or future (positivity)</li><li>• Can check if it is less than another time</li><li>• Can convert itself to minutes</li><li>• Can add itself to another time</li><li>• Can find the difference between itself and another time</li><li>• Can convert itself to a string</li><li>• Can get its year</li><li>• Can set its year</li><li>• Can get its month</li><li>• Can set its month</li><li>• Can get its day</li><li>• Can set its day</li><li>• Can get its hour</li><li>• Can set its hour</li><li>• Can get its minute</li><li>• Can set its minute</li><li>• Can get its positivity</li><li>• Can set its positivity</li></ul>	

# Software Architecture Design

REST Architecture:

<https://www.codecademy.com/articles/what-is-rest>

