Welcome to Y-Hack. Priceline.com is thrilled to be an event sponsor this year. So thrilled, in fact, that we're offering a very special prize to each member of the Big Red//Hacks team that comes up the most innovative, compelling, and useful app that makes use of the Priceline Hotels web-based API.

Priceline's API gives you access to real-time information about available rooms at hundreds of thousands of hotels worldwide. We've put together documentation on our web-based JSON API to help you get started writing a killer, custom Priceline app for Desktop or Mobile browsers. *See the following pages for details on our API.*

Your challenge: Build an app that helps your customers find the perfect hotel room at a great price, going above and beyond the regular Priceline.com customer experience. Here are some app ideas to get you started; use these ideas as starting points for your team's own exciting, innovative solution:

- **Yale Hockey Road Warrior**: A custom app for the Bulldog Faithfull to follow Yale wherever they play on the road. Mash up the official Yale Hockey road schedule with Priceline data to show available rooms for the dates and locations of all away games.

- **Spring Break Pro**: Merge a source of data for the names of the hottest Spring Break resort cities around the world, and Yale Spring Break dates, to pull in killer Priceline hotel deals.

- **Visit Me Abroad!**: Mash up with foreign exchange / overseas study; let friends or family drop in on you while you're spending that semester in Paris!

- **Bands on Tour**: Grab data from the BandsInTown concert API (www.bandsintown.com/api/1.0/overview), let the customer pick a band, then show Priceline hotel rates for each of the band's road dates and cities.

Start hacking! If you need tips, advice, or general help, we have a team of Priceline Develop-Mentors on site to answer your questions. Feel free to ask.

At the end of the event, the Priceline team will choose the best Priceline hacks, and award a prize to each member of the winning teams. First-prize winners will receive $500 hotel vouchers. Just in time for Spring Break! The hacks will be judged on the following criteria:

- **Creativity**: How original and exciting is your app idea?
- **Innovation**: Does your app bring together some great technology? Does it merge various sources of a data in a new and compelling way?
- **Execution**: Is your app fast, efficient, stable, and easy to use?

We wish you the best of luck and have fun!!

Hotel Listing Services

The Priceline.com Hotel Listing Service searches for and retrieves a specific hotel or a list of available hotels that match the customer's travel dates. The Hotel Listing Service returns the following:

• Geo location

• Hotel Amenities and Freebies

• Promotions

• Property Information

• Rate Information

• Room Availability

• Sponsored Hotels

The Hotel Listing API includes filters to limit the response based on the following:

• Amenities

• Location

• Price

• Star Rating

Overview

A search request is the first step to view hotels with available rooms. Submit a search request for hotels near a specific location or point of interest. The return response includes all hotels with available rooms based on the location and length of stay.

The Hotel Listing Service returns the lowest rate available at the hotel:

• `MinRates` - Indicates the minimum rate for a room at the hotel

• `MinRatePromos` – Indicates the hotel offers a promotion

• `AvailablePromos` - Returns if the hotel offers a promotion

• (Optional) Estimated Rates - Return when a search does not include `check-in` and `check-out`

API Endpoints:

Base URL: www.priceline.com/pws/v0/stay/retail/listing/

Format: JSON

Request Parameters:

Query Parameters – these can be added to the above URLs

Name	Type	Sample Values
check-in	Date	20151120
check-out	Date	20151122
rooms	Integer (default=1)	1
offset	Integer – used in combination with page size for pagination	0
page-size	Integer	40
sort	String	• HDR – popularity score – default if none is specified • PROXIMITY – proximity to city center • PRICE - Lowest price • HL_PRICE – Highest to low price • REVIEW_SCORE • NAME - alphabetically
response-options	String	To include more information in the search response, use the response-options parameter. This parameter accepts one or more options in a comma-separated list. *TRIP_FILTER_SUMMARY*, *DETAILED_HOTEL*, *DETAILED_ROOM*, *DETAILED_RATE*, *HOTEL_IMAGES*, *RATINGS*, *REVIEWS*, //user reviews *QUOTES*, //user quotes *BOOKINGS*, //User bookings snapshot *SIM_HOTELS*, //similar hotels *NEARBY_ATTR*, //provides attractions and restaurants *POP_COUNT*, // Popularity-count *NEARBY_CITY*, *CLUSTER_INFO*, *NOSPONS* //Don't Get sponsored hotel ads (default is SPONS)

currency	String	USD,CAD,GBP
searchTerm	String	e.g POI – times-square Airport – jfk Address – 211%20FremontSt,%20San%20Francisco,CA
rguid	String	CallTimestamp+"_Hackathon"

Filtering related Query Parameters:

Name	Type	Sample Values
min-Price	Double	100 – Returns all hotels with price above
max-price	Double	200 – Returns all hotels with price below
hotel-name	String	Match hotels with provided string
city-id	String	
star-ratings	String	Setting "star-ratings=2.5,5": only hotels with a star-rating of 2.5 and those with a star rating of 5 will be returned. The comma-separated list is not a range,sets the specific values
amenities	String	AIRSHUTTL, BUSCNTR, FINTRNT, FINTRPUB, FINTRRM ,FITSPA, FPRKING, HANDFAC, NSMKFAC, RESTRNT, SPOOL, SPOOLIN, SPOOLOUT
brand-ids	Double	
min-guest-rating	Double	4.0 – Returns all hotels with guest rating above provided value
max-guest-rating		7.0 – Returns all hotels with guest rating below provided value

Sample Requests and Response

URL:

Response JSON:

{

- **resultCode:** 200,
- **resultMessage:** "SUCCESS",
- **duration:** 620,
- **version:** "3.1.4",
- **rguid:** "3459hjdfdf",
- **src:** "006",
- **totalSize:** 553,
- **sortType:** "HDR",
- **errorCode:** 0,
- **hotels:**

  [

  - {
    - **hotelId:** "3230705",
    - **name:** "Hotel Pennsylvania",
    - **brandId:** "0",
    - **description:** "This Manhattan hotel is located across the street from Madison Square Garden and Penn Station. The hotel offers a gym and a tour desk with ticket services.Each air-conditioned room at the Hotel Pennsylvania provides cable TV with video games. Guests also have access to a work desk, alarm clock and hairdryer in every room.The Pennsylvania Hotel includes a 24-hour coffee shop and a restaurant. Guests can make transportation reservations and acquire theater tickets at the hotel.Times Square and the Museum of Modern Art are less than a 15-minute walk from Hotel Penn. Guests are also one block from Macy's and 2 blocks from the Empire State Building. ",
    - **hotelVirtualTourURL:** "http://www.vfmii.com/exc/aspquery?command=invoke&ipid=1253861&ids=145062",
    - **starRating:** 2,
    - **location:**

      {

      - **address:**

        {

        - **addressLine1:** "401 7th Avenue",
        - **cityName:** "New York",
        - **provinceCode:** "NY",
        - **countryName:** "United States",
        - **zip:** "10001",
        - **phone:** "212-736-5000",
        - **isoCountryCode:** "US"

```
        },  {
          ▪ longitude: -73.991236,
          ▪ latitude: 40.750096,
          ▪ timeZone: "America/New_York",
          ▪ neighborhoodId: "3014",
          ▪ neighborhoodName: "Chelsea",
          ▪ cityId: 3000016152,
          ▪ zoneId: "51142"

        },

  ▪ thumbnailUrl: "http://mobileimg.priceline.com/htlimg/3230/
    3230705/thumbnail-150-square.jpg",
  ▪ policies:

    {

      ▪ importantInfo:

        [

          ▪ "Please note, all non-refundable reservations (room
            rate+all applicable taxes) will be charged on the
            day of booking.

        ]

    },

  ▪ hotelFeatures:

    {

      ▪ features:

        [

          ▪ "24-hour front desk",
          ▪ "Air conditioning",
          ▪ "Concierge service",
          ▪ "Currency exchange",
          ▪ "Express check-in/check-out",
          ▪ "Facilities for disabled guests",
          ▪ "Fitness center",
          ▪ "Laundry",
          ▪ "Meeting/banquet facilities",

        ],

      ▪ hotelAmenities:

        [

          ▪ {
              ▪ code: "PETALLOW",
```

- **name:** "Pets Allowed",
- **type:** "PET",
- **free:** false,
- **displayable:** true,
- **filterable:** true

},

- {
  - **code:** "FITSPA",
  - **name:** "Fitness Center",
  - **type:** "FITNESS",
  - **free:** false,
  - **displayable:** true,
  - **filterable:** true

},

- {
  - **code:** "BUSCNTR",
  - **name:** "Business Center",
  - **type:** "BUSINESS",
  - **free:** false,
  - **displayable:** true,
  - **filterable:** true

},

- {
  - **code:** "RESTRNT",
  - **name:** "Restaurant",
  - **type:** "RESTAURANT",
  - **free:** false,
  - **displayable:** true,
  - **filterable:** false

},

- {
  - **code:** "NSMKFAC",
  - **name:** "No Smoking Rooms/Facilities",
  - **type:** "SMOKING",
  - **free:** false,
  - **displayable:** true,
  - **filterable:** true

},

- {
  - **code:** "HANDFAC",
  - **name:** "Handicapped Rooms/Facilities",
  - **type:** "HANDICAP",
  - **free:** false,
  - **displayable:** true,
  - **filterable:** true

}

```
        ],

  ▪  highlightedAmenities:

     [

       ▪  "PETALLOW",
       ▪  "FITSPA",
       ▪  "RESTRNT"

     ],

  ▪  topAmenities:

     [

       ▪  "Fitness centre",
       ▪  "Business centre",
       ▪  "Pets allowed",
       ▪  "Restaurant",
       ▪  "Non-smoking rooms",
       ▪  "Valet parking"

     ]

  },

▪  overallGuestRating: 4.9,
▪  totalReviewCount: 577,
▪  guestReviewGdsName: "PCLN",
▪  proximity: 6.767396467433635,
▪  chainCode: "WV",
▪  ratesSummary:

   {

   ▪  minPrice: "156.40",
   ▪  minCurrencyCode: "USD",
   ▪  minCurrencyCodeSymbol: "$",
   ▪  minStrikePrice: "181.40",
   ▪  pclnId: "61AEC79F0151C7DDADCBA31321AFA8FF6289C64AF2139
      C32FD772257C1D1AC62",
   ▪  freeCancelableRateAvail: true,
   ▪  payWhenYouStayAvailable: true,
   ▪  minRatePromos:

      [

        ▪  {
           ▪  type: "DISCOUNT",
           ▪  title: "On Sale Now -> Save 14% on this stay",
           ▪  desc: "Book Now and Save",
           ▪  terms: "Blackout dates apply, Offer is not
              combinable with any other offer, Minimum Stay
              Required, Based on availability",
           ▪  valueAddDesc: false,
           ▪  discountType: "PERCENT",
```

```
                ▪ discountPercentage: 13.78169791,
                ▪ displayStrikethroughPrice: "181.40",
                ▪ displayStrikethroughPriceCurrency: "USD",
                ▪ nativeStrikethroughPrice: "181.40",
                ▪ nativeStrikethroughPriceCurrency: "USD",
                ▪ showDiscount: true,
                ▪ freeNightCumulative: false,
                ▪ numNightsPerFreeNight: 0,
                ▪ numFreeNightsGiven: 0

            }

        ],

    ▪ availablePromos:

        [

            ▪ {
                ▪ type: "DISCOUNT",
                ▪ title: "On Sale Now -> Save 14% on this stay",
                ▪ desc: "Book Now and Save",
                ▪ terms: "Blackout dates apply, Offer is not
                  combinable with any other offer, Minimum Stay
                  Required, Based on availability",
                ▪ valueAddDesc: false,
                ▪ discountType: "PERCENT",
                ▪ discountPercentage: 13.78169791,
                ▪ displayStrikethroughPrice: "181.40",
                ▪ displayStrikethroughPriceCurrency: "USD",
                ▪ nativeStrikethroughPrice: "181.40",
                ▪ nativeStrikethroughPriceCurrency: "USD",
                ▪ showDiscount: true,
                ▪ freeNightCumulative: false,
                ▪ numNightsPerFreeNight: 0,
                ▪ numFreeNightsGiven: 0

            }

        ],

    ▪ gid: 5108,
    ▪ rateTypeCode: "M",
    ▪ rateCategoryType: 9,
    ▪ planCode: "NR3N",
    ▪ roomCode: "52694_88034",
    ▪ rateIdentifier: "FA34E2ED4A103D41C2DB8D0246BE89316AF16
      847192F3C2CB160BE3DB7EB0191E2B258E1861BDCB9",
    ▪ additionalRatesInfo:

        [

            ▪ {
                ▪ gid: 3521,
                ▪ rateTypeCode: "R",
                ▪ merchantEnabledForProp: false,
                ▪ agencyEnabledForProp: true,
```

- rateIdentifier: "DDB5CFFBD29D43E8027E6BF144F377B5B160BE3DB7EB0191B160BE3DB7EB0191E2B258E1861BDCB9"

},

- {
  - gid: 2030,
  - rateTypeCode: "R",
  - merchantEnabledForProp: false,
  - agencyEnabledForProp: true,
  - rateIdentifier: "B7C7009CAE3AE2A69AB0F906E8260817F87C5CB7BF17E9CB15129C54D20FCE28E2B258E1861BDCB9"

}

],

- ccNotRequiredAvailable: false

},

- allInclusiveRateProperty: false,
- recentlyViewed: false,
- dealUnwrapable: false

}

],

- tripFilterSummary:

{

  o totalSizeFiltered: 553

},

- cityInfo:

{

  o cityId: 3000016152,
  o cityName: "New York",
  o stateCode: "NY",
  o stateName: "New York",
  o countryCode: "US",
  o countryName: "United States",
  o areaId: 55,
  o lat: 40.825745,
  o lon: -73.909065

},

- signInDealRelatedInfo:

```
{

    o  promptUserToSignIn: false,
    o  numberOfAvailableSignInDeals: 0

    }

}
```