W Step

We have been commissioned to create a hotel management application. We need a web portal that allows people to book an available room. We also need a desktop app for when they check in.

We need to create a minimum viable product (MVP) that will allow the customer to get going and to identify what features should be added later.

* Hotel Management App
* Web Portal
  + Allow guests to book rooms
  + We have to know if rooms are available
* Desktop App
  + The guest will check in via the desktop app
  + We need to be able to look up guest reservations by name or other piece of information.
* This is an MVP

O Step

# Things for the MVP

* ASP.NET Core Razor Pages
* Web page – Searching for a room
  + Start Date
  + End Date
  + Displays list of hotel room types that are available
  + User can choose one to book
* Web page – Book room
  + Takes room from search page
  + Ask for guest Info (name)
  + Book upon submission
* WPF Core Desktop App
* WPF page – Search for user
  + Search by last name and use today’s date
  + Display a list of matching reservations
  + Have a button that checks in a guest
* SQL Server data storage

# Things for a future version

* Authenticate guests
* Guest history
* Multiple hotel capabilities
* Allow guests to check out
* Allow booking search by reservation number or other pieces of information
* Allow data to be stored in other database types like SQLite

# Assumptions that were confirmed

* One hotel only
* Guests book a hotel room type, not a specific room
* A hotel employee will check guests in
* Booking search is done by last name

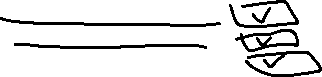
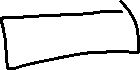
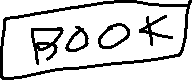
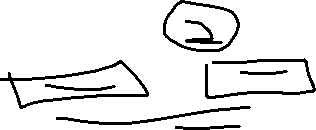
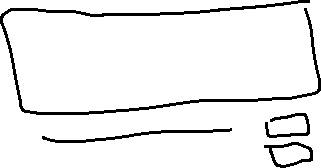


* Check in means we just mark that they are at the hotel
* Data will be stored in SQL Server



* No API middle layer
* Use the latest .NET technologies

U Step



# Missing Pieces / Future version ideas

* Web – confirmation page
* Web – confirmation email
* WPF – confirmed checked in
* Cost of room
* Check in payment
* Invoice

L Step

# ASP.NET Core Razor Pages Web App

* HTML form with start date and end date and submit button
* Connects to data access layer and passes the date values
* Data access searches available rooms table in SQL database for rooms that are available on each night in between the two dates, inclusive of start date but exclusive of end (checkout) date
* Return rooms to be grouped by room type
* List of available room types returned via data access layer to web app
* Displayed on page with “Book” button beside each one (data grid??); if none, alert user no rooms at the inn
* When Book button is clicked, switch to booking page, bringing in selected room type and dates
* HTML form with guest information (first and last name) and submit button
* On submit, information passed to data access layer which will:
  + Create guest in guest table
  + Create booking
  + Mark selected room as no longer available on selected nights
* Returns to 1st form

# WPF Core Desktop App

* WPF Form with last name field and search button
* On click, gets current date (DateTime.Now) and passes last name and date to data access layer
* Data access searches bookings for matching bookings by last name and start date and returns list
* WPF form displays list with check-in button or checkbox next to each match, or alerts user there was no match.
* User clicks on button or checks checkbox which marks booking as guest having checked in.