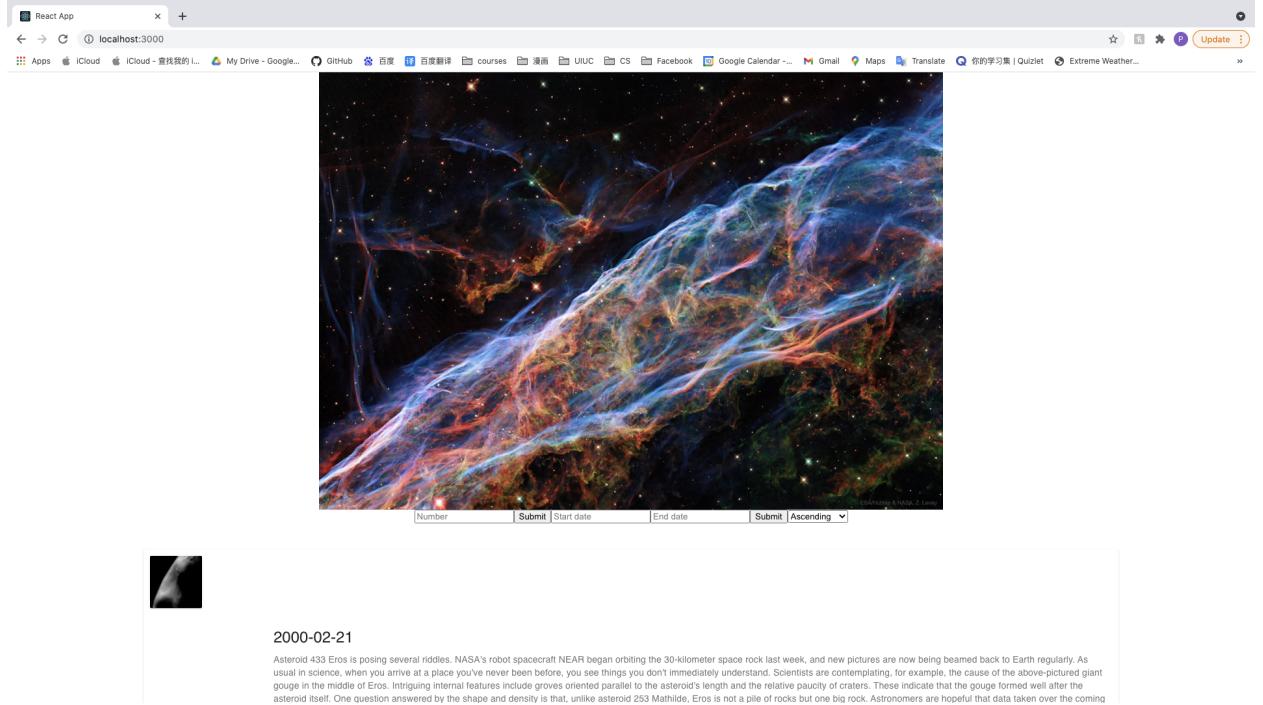


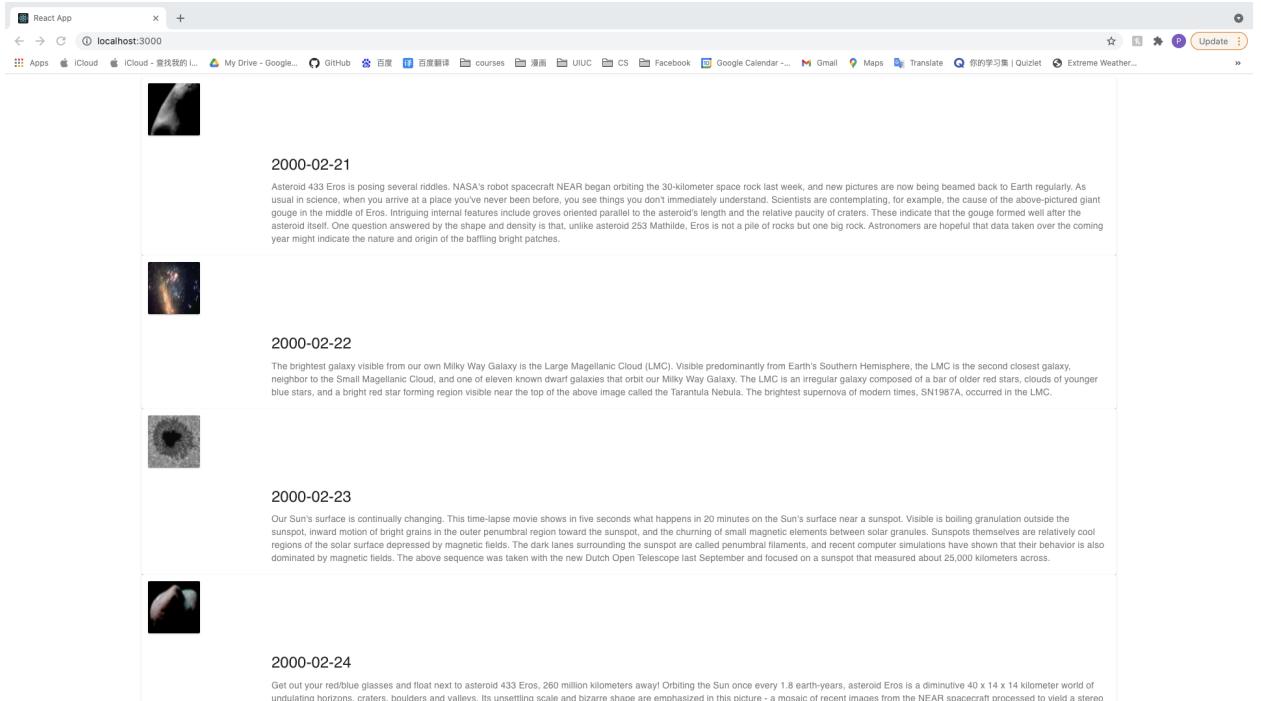
Manual Test Plan

- link: <http://localhost:3000/> should be like

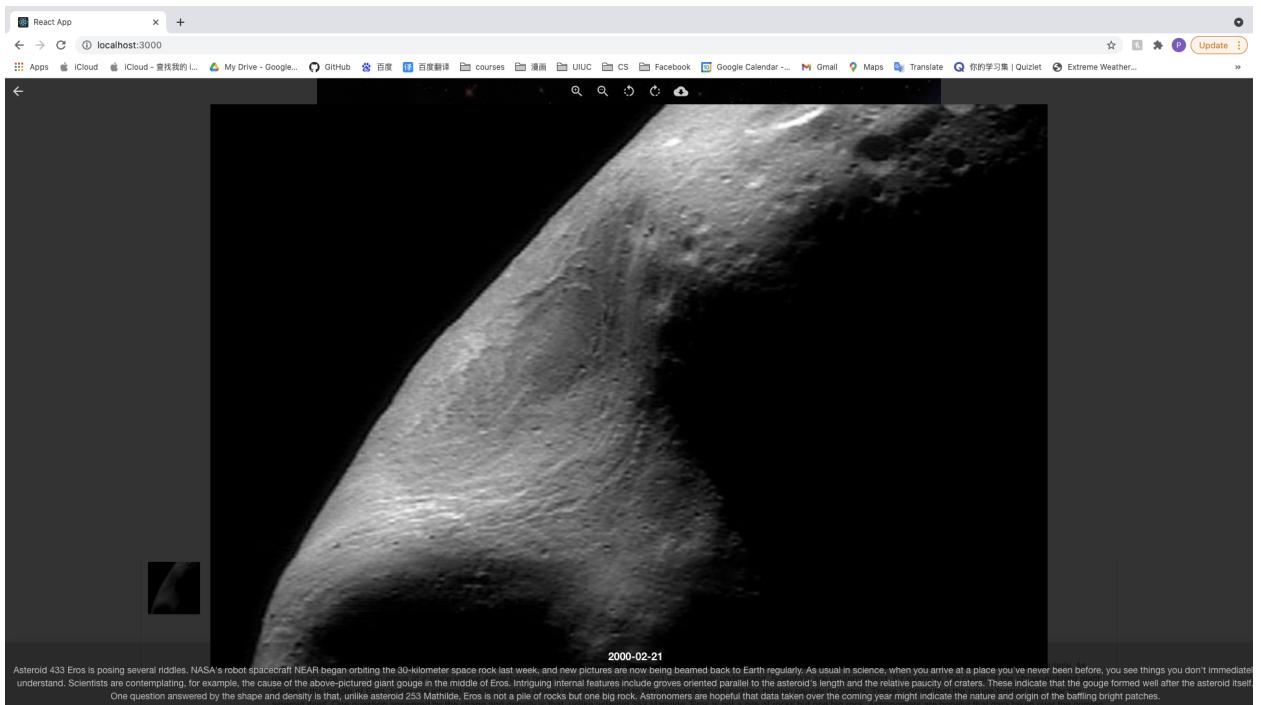


With the today's image from APOD api always displays at top of the page

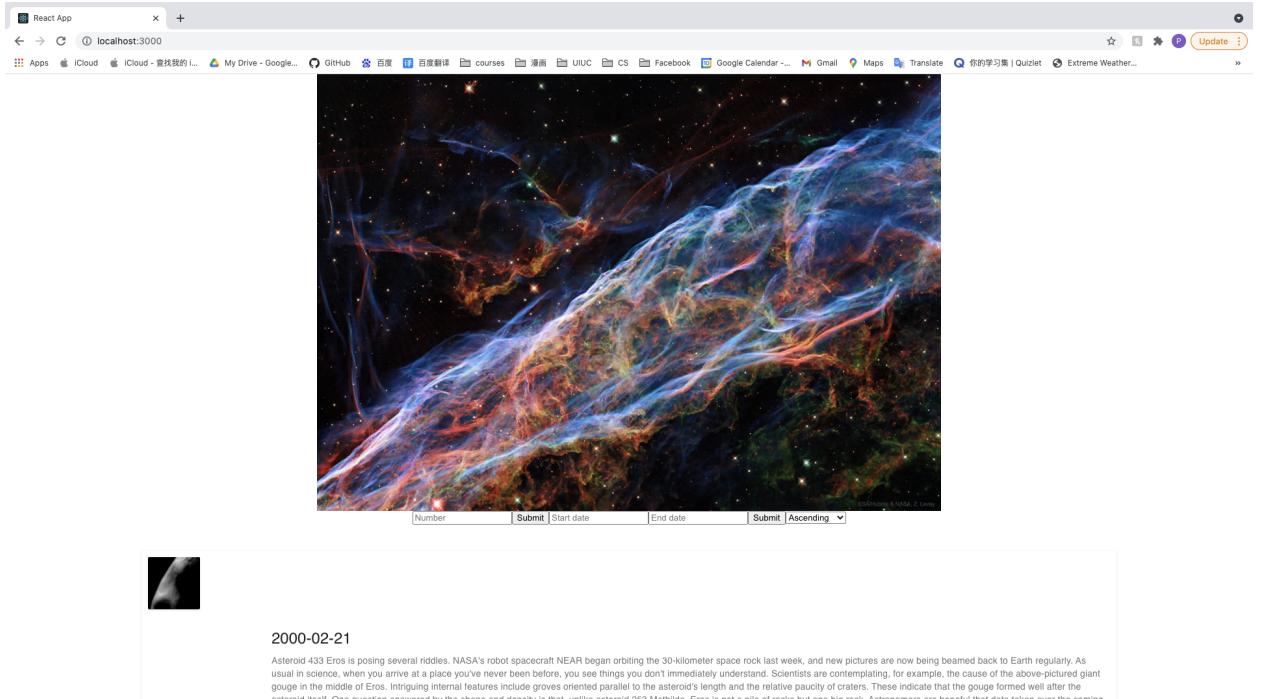
- Some images with corresponding information should be displayed at the bottom as a list



3. By clicking any images display at the bottom, it will display a bigger image, with image information provided below



4. Clicking left top arrow, you should go back to the main page



5. The part between today's image and image list should be some form that can be used to change the image list displaying as below

6. Input 2 to the first form, should randomly display 2 images in the image list

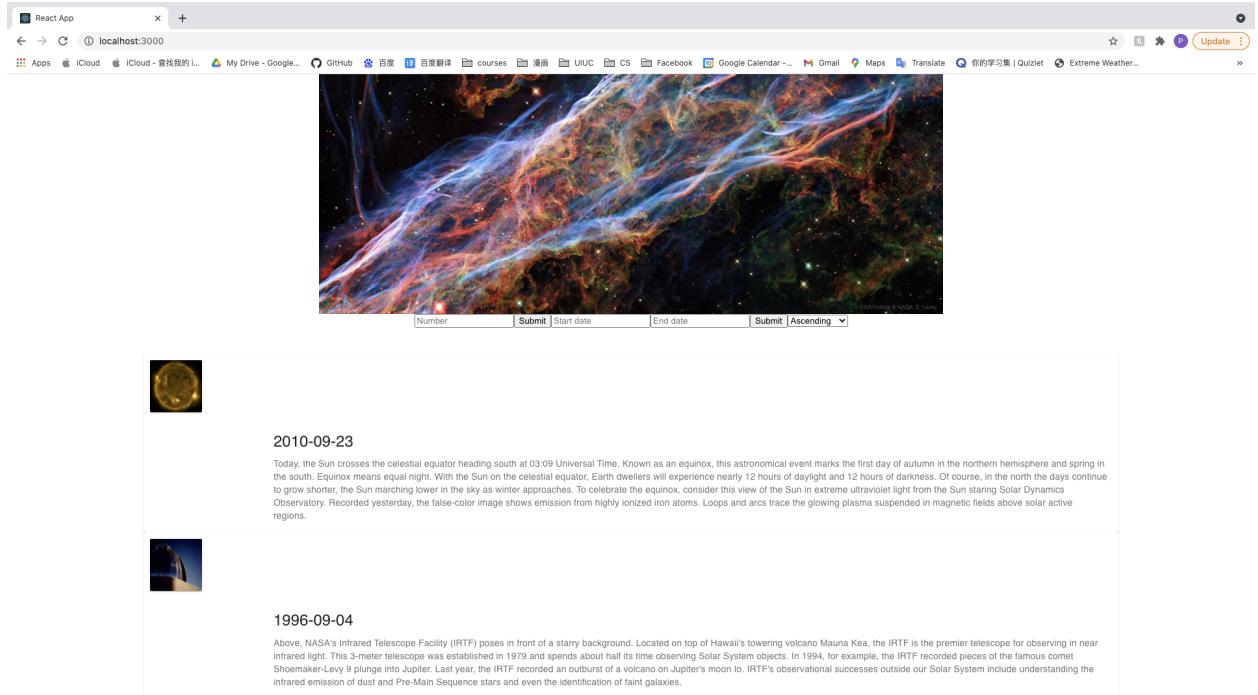
2010-09-23

Today, the Sun crosses the celestial equator heading south at 03:09 Universal Time. Known as an equinox, this astronomical event marks the first day of autumn in the northern hemisphere and spring in the south. Equinox means equal night. With the Sun on the celestial equator, Earth dwellers will experience nearly 12 hours of daylight and 12 hours of darkness. Of course, in the north the days continue to grow shorter, the Sun marching lower in the sky as winter approaches. To celebrate the equinox, consider this view of the Sun in extreme ultraviolet light from the Sun staring Solar Dynamics Observatory. Recorded yesterday, the false-color image shows emission from highly ionized iron atoms. Loops and arcs trace the glowing plasma suspended in magnetic fields above solar active regions.

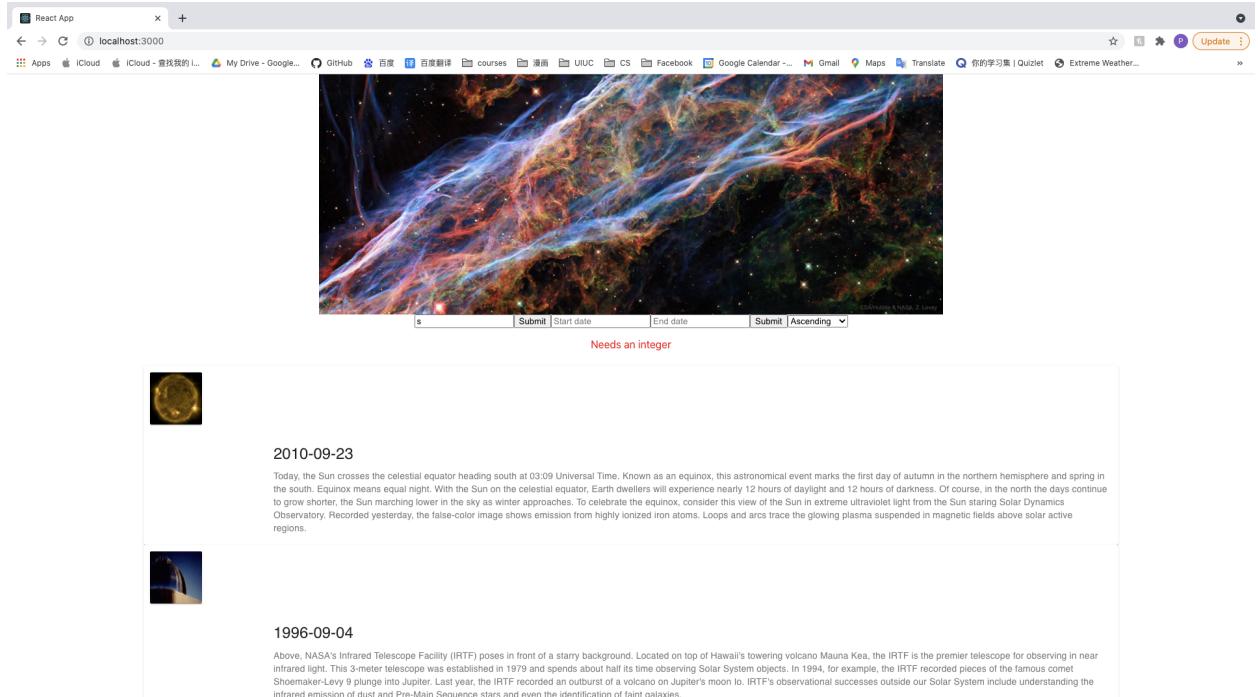
1996-09-04

Above, NASA's Infrared Telescope Facility (IRTF) poses in front of a starry background. Located on top of Hawaii's towering volcano Mauna Kea, the IRTF is the premier telescope for observing in near infrared light. This 3-meter telescope was established in 1979 and spends about half its time observing Solar System objects. In 1994, for example, the IRTF recorded pieces of the famous comet Shoemaker-Levy 9 plunge into Jupiter. Last year, the IRTF recorded an outburst of a volcano on Jupiter's moon Io. IRTF's observational successes outside our Solar System include understanding the infrared emission of dust and Pre-Main Sequence stars and even the identification of faint galaxies.

7. After clicking the submit button, the number you input should be cleared

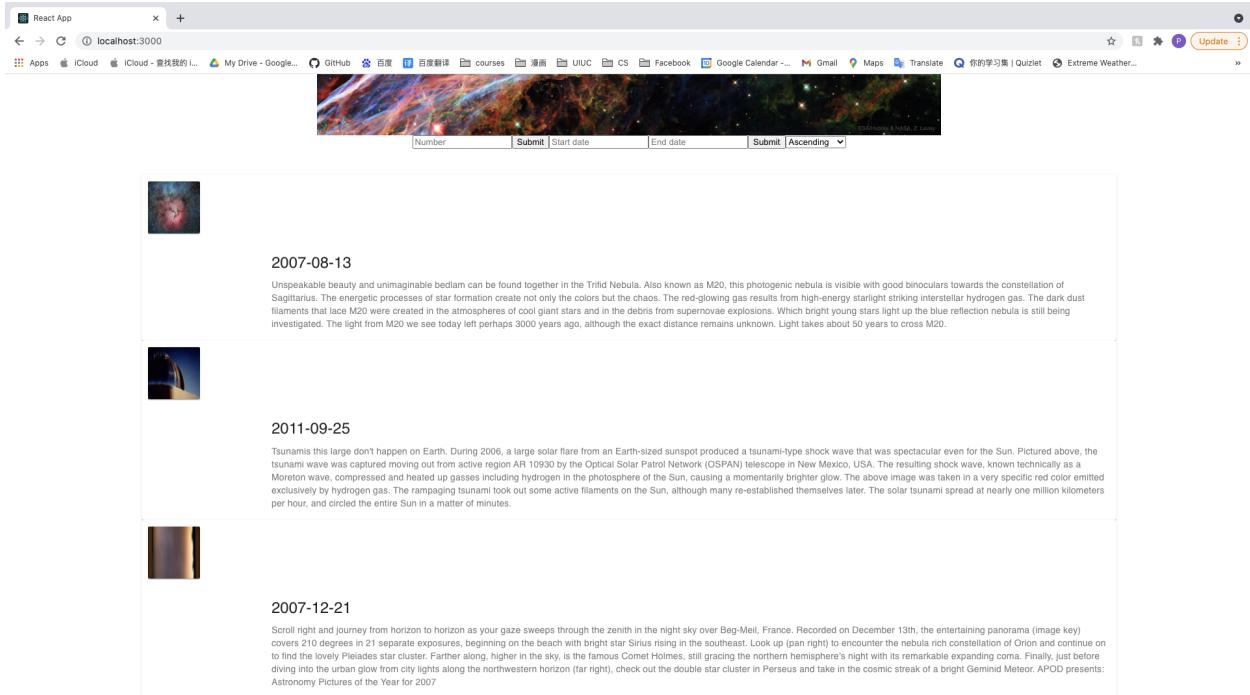


8. If you input anything rather than integer, it will show some error messages

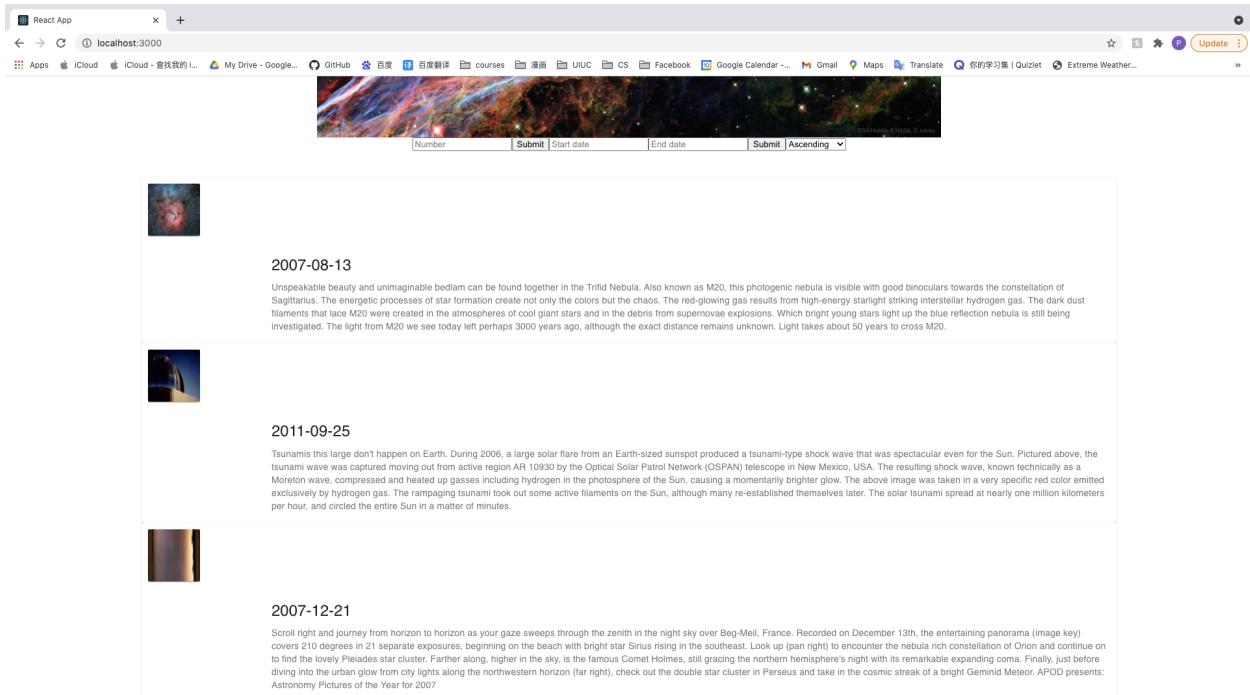


9. The input won't be cleared with the error message shown up

10. Inputting any integer like 3 will clear the error message and randomly show another 3 images below



11. Choosing Descending in the left selection, will reorder image list with descending order corresponds to it's date



12. Choosing Ascending in the left selection, will reorder image list with ascending order corresponds to it's date

React App | localhost:3000

Number | Submit | Start date | End date | Submit | Ascending

2007-08-13

Unspeakable beauty and unimaginable bedlam can be found together in the Trifid Nebula. Also known as M20, this photogenic nebula is visible with good binoculars towards the constellation of Sagittarius. The energetic processes of star formation create not only the colors but the chaos. The red-glowing gas results from high-energy starlight striking interstellar hydrogen gas. The dark dust filaments that lace M20 were created in the atmospheres of cool giant stars and in the debris from supernovae explosions. Which bright young stars light up the blue reflection nebula is still being investigated. The light from M20 we see today left perhaps 3000 years ago, although the exact distance remains unknown. Light takes about 50 years to cross M20.

2007-12-21

Scroll right and journey from horizon to horizon as your gaze sweeps through the zenith in the night sky over Beg-Mell, France. Recorded on December 13th, the entertaining panorama (image key) covers 210 degrees in 21 separate exposures, beginning on the beach with bright star Sirius rising in the southeast. Look up (pan right) to encounter the nebula rich constellation of Orion and continue on to find the lovely Pleiades star cluster. Farther along, higher in the sky, is the famous Comet Holmes, still gracing the northern hemisphere's night with its remarkable expanding coma. Finally, just before diving into the urban glow from city lights along the northwestern horizon (far right), check out the double star cluster in Perseus and take in the cosmic streak of a bright Geminid Meteor. APOD presents: Astronomy Pictures of the Year for 2007

2011-09-25

Tsunamis this large don't happen on Earth. During 2006, a large solar flare from an Earth-sized sunspot produced a tsunami-type shock wave that was spectacular even for the Sun. Pictured above, the tsunami wave was captured moving out from active region AR 10930 by the Optical Solar Patrol Network (OSPN) telescope in New Mexico, USA. The resulting shock wave, known technically as a Moreton wave, compressed and heated up gasses including hydrogen in the photosphere of the Sun, causing a momentarily brighter glow. The above image was taken in a very specific red color emitted exclusively by hydrogen gas. The rampaging tsunami took out some active filaments on the Sun, although many re-established themselves later. The solar tsunami spread at nearly one million kilometers per hour, and circled the entire Sun in a matter of minutes.

13. With start date input as 2020-01-03, and end date input as 2020-01-06

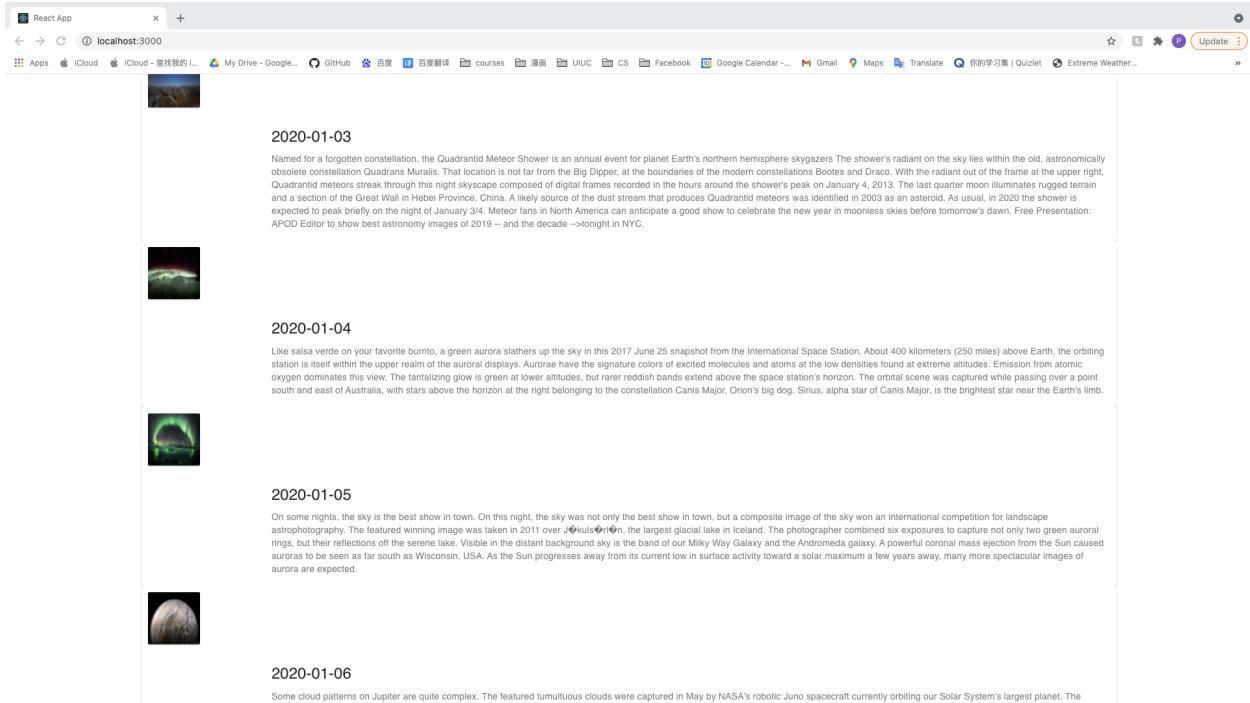
React App | localhost:3000

Number | Submit | 2020-01-03 | 2020-01-06 | Submit | Ascending

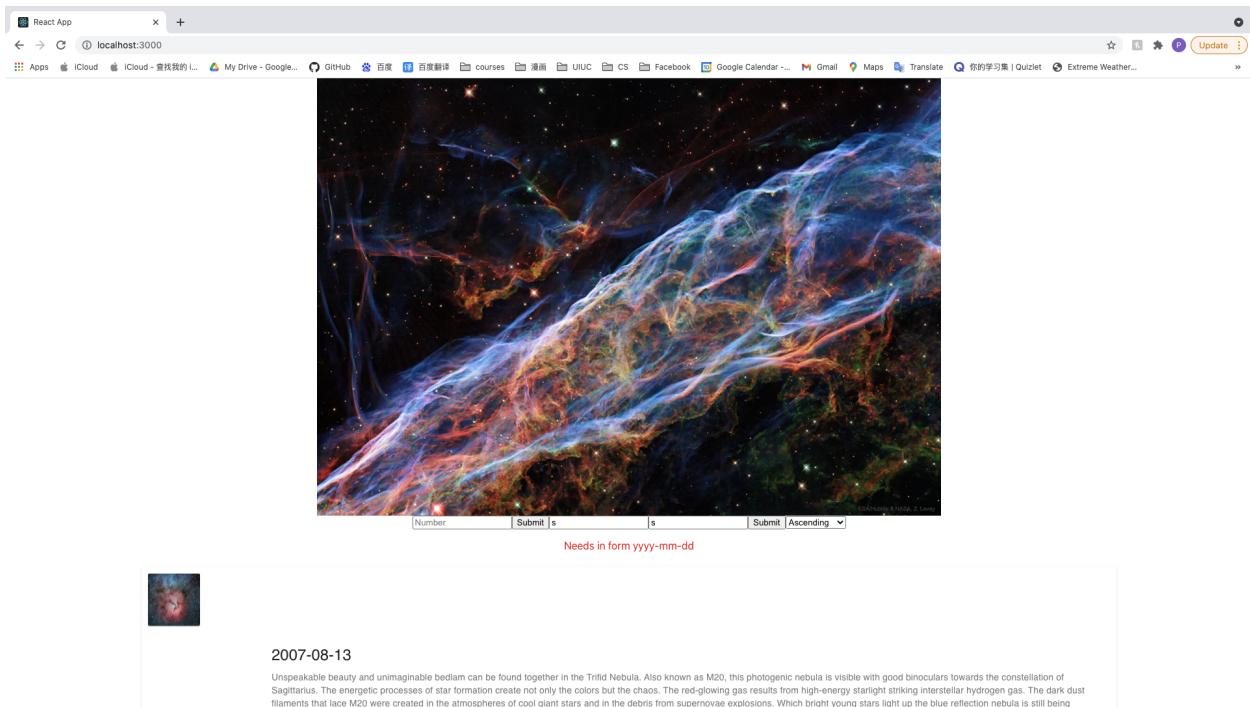
2002-11-02

Scattered within this cavernous nebula, cataloged as NGC 604, are over 200 newly formed hot, massive, stars. At 1,500 light-years across, this expansive cloud of interstellar gas and dust is effectively a giant stellar nursery located some three million light-years distant in the spiral galaxy, M33. The newborn stars irradiate the gas with energetic ultraviolet light stripping electrons from atoms and producing a characteristic nebular glow. The details of the nebula's structure hold clues to the mysteries of star formation and galaxy evolution.

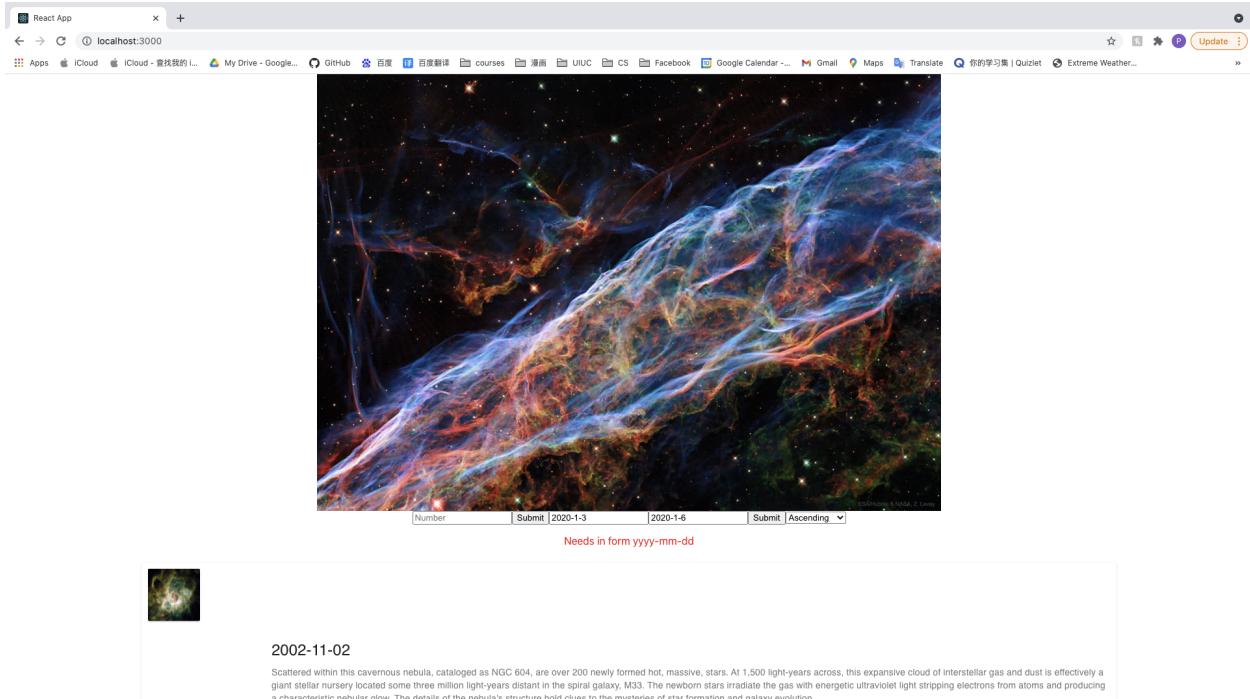
It should display the corresponding images and information as below



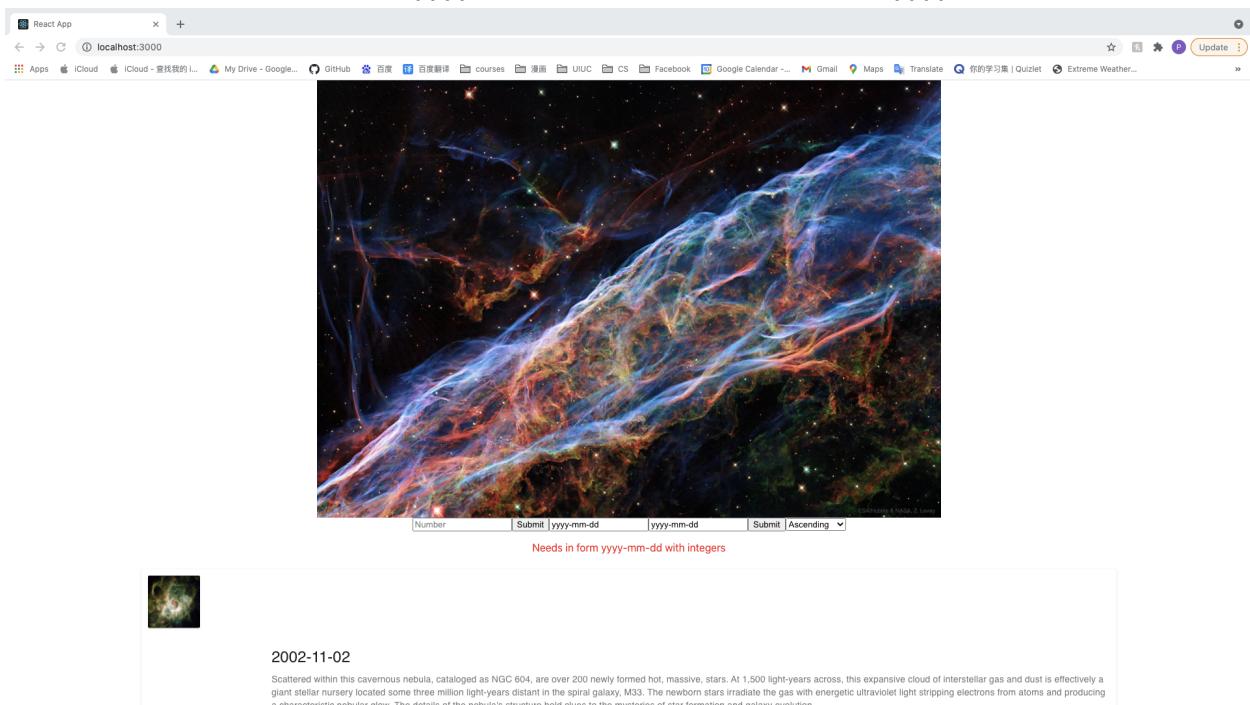
14. With invalid input like an string, it should display error message as “**Needs in form yyyy-mm-dd**”



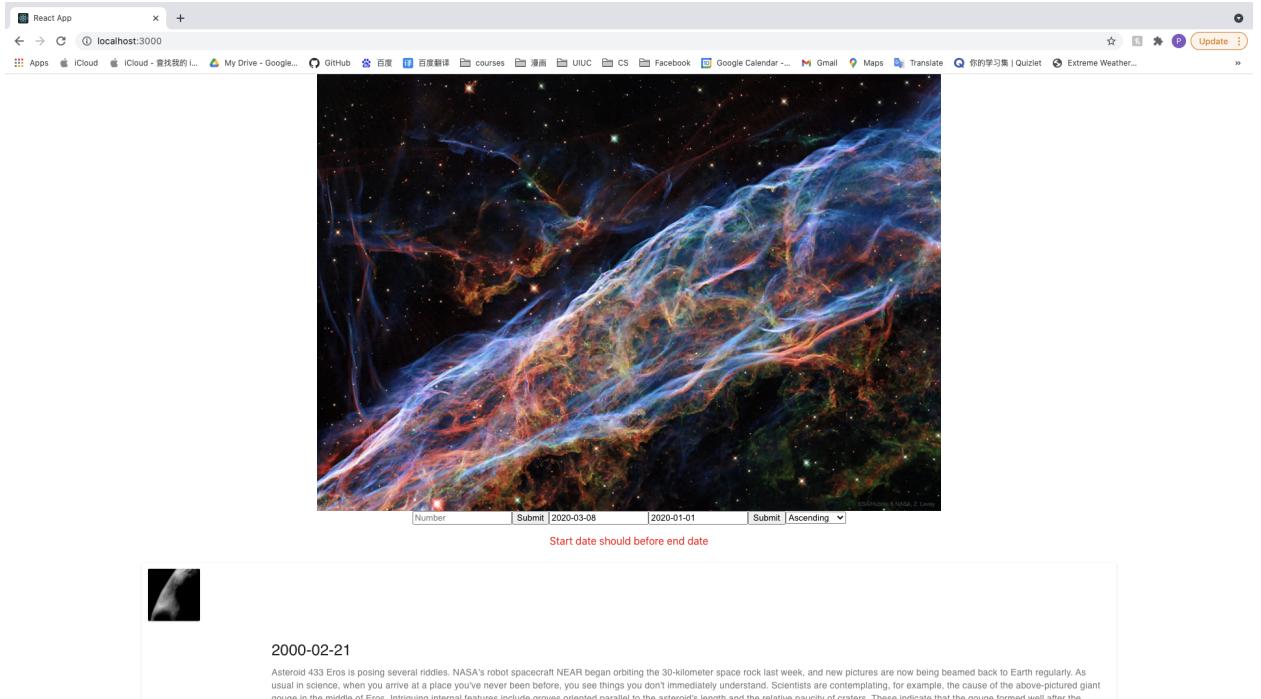
15. With invalid input like start date with 2020-1-3, and end date input with 2020-1-6, should display “**Needs in form yyyy-mm-dd**”



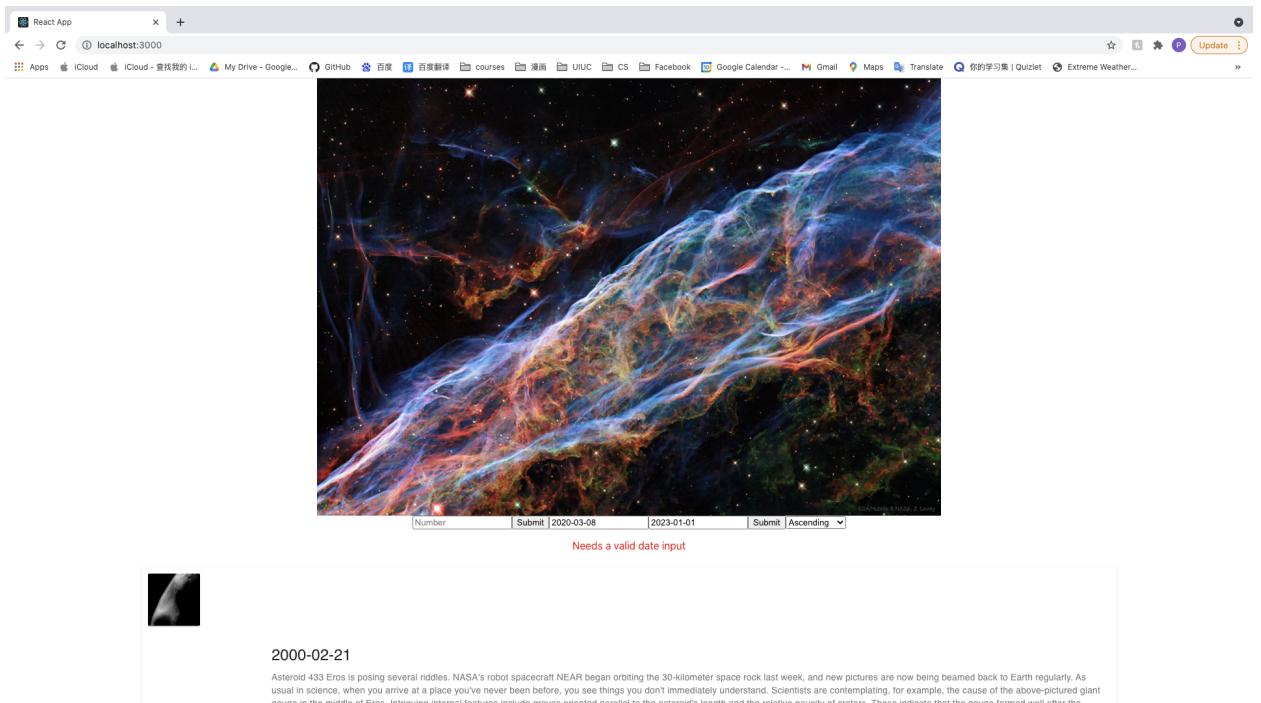
16. With invalid input like input like yyyy-mm-dd, and end date input like yyyy-mm-dd



17. With invalid input like input like 2020-03-08, and end date input like 2020-01-01, should display "Start date should before end date"



18. With invalid input like input like 2020-03-08, and end date input like 2023-01-01, should display “**Needs a valid date input**”



19. With invalid input in date form, any input value won't be cleared after clicking submit
20. With valid input in date form, any input value will be cleared after clicking submit