1. Restrict user per hits . if any user hit an api again and again then server goes down we use throttling or other techniques to resolve this.  
   <https://stackoverflow.com/questions/20253425/throttle-and-queue-up-api-requests-due-to-per-second-cap>  
   https://blog.logrocket.com/rate-limiting-node-js/
2. <https://httpstatuses.com/> responses
3. **validation library:**  
   There are multiple validation libraries . but this one is good **joi**  
   <https://www.npmjs.com/package/joi>  
   another one  
   <https://www.npmjs.com/package/validator>
4. **Send mail to users: node mailer**https://www.w3schools.com/nodejs/nodejs\_email.asp
5. Query Params Vs Path Params

**A path Params**, which contains data, usually organized in hierarchical form, that appears as a sequence of segments separated by slashes. its the part of url  
**An optional query**, separated from the preceding part by a question mark (?), containing a query string of non-hierarchical data.

1. Add remote url  
   <https://support.atlassian.com/bitbucket-cloud/docs/change-the-remote-url-to-your-repository/>
2. Problem: we want global function or variable which we can access in any file without exporting . we can get this if we write into app.js or index.js .the things which we write into server’s file can access any where.
3. Create pdf.
   1. For this purpose first we create html then we convert this to pdf file by using this library  
      <https://www.npmjs.com/package/html-pdf?activeTab=readme>
   2. Code implemented in result pricing project.
4. Download file:  
   we use res.download  
   https://www.tutsmake.com/node-js-rest-api-download-file-tutorial/