**Systems Analysis and Design**

**Phase 1 Non Functional Requirements**

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# Non-functional requirements

* **Security**
  + **Legal** - First and foremost, our app/website must comply with Data Protection and the General Data Protection Regulations of Ireland.
  + **Confidentiality -** The data must be encrypted, and users should feel safe using our services every time.
  + **Safety -** Payments must be processed via a third party service.
* **Reliability**
  + **Availability** - Our services must be reliable, and have and be up and operating at least 99.9% of time. Given that peak hours for usage of similar apps to ours is 11:30 AM to 2:00 PM and 5:30 PM to 9:00 PM on weekdays, and the busiest hours being on weekends in particular on Fridays and Saturdays 6:00PM – 9:00PM. So with the peak hours of around 6 hours per day (rough estimate)(*Deliveroo | The Deliveroo Riders Website*, n.d.; Zhang, 2024), and majority of restaurants being closed after 2:00 AM, we have some “wiggle room” and 8.75 hours of downtime per year should not be very problematic.
* **Performance Efficiency**
  + **Response Time/Speed –** after each click, our page/app should not take more than two 3 seconds to load as long as the internet connection is strong, and stable. Additionally, payment processing should take 1 minute at most, and should not exceed a minute.
* **Portability**
  + The website must be optimized for all major browsers including: Chrome, Safari, Edge, Firefox, Opera, etc. And should run without any problems on Mac OS, Windows, and Linux. The app must run on IOS, and on Android devices (targeted devices).
  + Language – both, the app and the website must have options between English, French, Spanish, Arabic, and Mandarin interfaces.
* **Usability**
  + **Accessibility –** our website, and our app must both comply with Web Content Accessibility Guidelines 2.0. (Initiative (WAI), n.d.)
    - Additionally, both the website and the app must cater to various physical, and cognitive disabilities including: color blindness, autism, epilepsy, and several other cognitive disabilities. For physical disabilities the interface must have at least “one handed” mode, and simplified menus for ease of access.
* **Compatibility**
  + **System Requirements and Memory –** Gus Station app will be 25MB’s to download, but will require around 120MB’s of memory, as the app will store some data. The required OS will be: Android 6 and up for Android devices, and IOS 13.6 and above for IOS devices.
* **Maintainability**
  + **Frequency of Revisions –** Our app must be updated at least once a month, to avoid any complications with bugs. If any serious bug arises that hinders usage of our app, the issue must be addressed immediately, and a new update must be sent out at the earliest convenience.
* **Technical Environment** 
  + The system must be build using Java, and the code must be accessible through repositories for ease of maintainability.