**Expanding on the Context Diagram.**

**Lists of Requirements**

**1. User/Custom**

* **User to create account with APS system.**
* **User provide his/her details to APS**
* **User update his/her details on APS**
* **User provide login details to APS**
* **User to configure and provide details of his account with billing companies.**
* **User to sign up with the billing company.**
* **User to login into APS**
* **User request for billing statement.**
* **User to configure billing dates.**

**2. Scheduler**

* **Schedule scraping jobs**
* **Configuration of the scheduler –**

**Conditions**

1. **When billing site is unavailable for scraping**
2. **Avoid peak demand periods**
3. **To match the billing cycle of the billing company**
4. **Following an unsuccessful scraping due to errors or statement not available.**

**3. Error Handling Requirements**

**Conditions**

1. **Invalid Credentials – Invalid login page presented to user, user to supply correct credentials before scraping can be done. User account status changed from active to inactive.**
2. **User not signs up with billing company- user redirected to sign up page for the billing company.**
3. **User has not accepted the T&C – APS notify the user to sign up the T&C before scraping.**
4. **Billing Site Down – Display page to notify the user.\*\*\*\*\***
5. **Portion of Site not available- Display page to notify the user. Scarping is delayed before another attempt is made to the site.**
6. **Broken Script – Notify the developer to determine the nature of the failure.(Not the user!!!).**
7. **Site changed changing position of data – Generate a broken script condition**

**4. Storage**

* **User credentials to be stored securely.**

**5. Statement**

* **Common fields**
* **Statement Specific fields**
* **Convert text data to numeric data.**

**6. Integrity Checks**

* **Standard Integrity Checks – by recalculating certain fields to verify the accuracy of the data e.g. VAT. Or by comparing duplicate fields.**
* **Custom Integrity Checks – Checks the details of the user against the account in the billing company.**

**Specification By Example**

**I want to be able to view all my accounts from one system as a customer of Pageonce so that I don’t have to login into individual systems to view the account statements.**

**Given that I have successfully login into the APS**

**And have active account with the billing company**

**When I supply the correct account details**

**And the billing site is active**

**Then a statement of all my accounts is returned.**

**Given that a user has provided incorrect login credentials**

**Then an error message is displaced**

**And user directed to the login screen**

**Given that a user has successfully login into APS**

**And has provided incorrect account details with billing company**

**When the scraper run**

**Then an error message is displaced**

**And the user directed to the billing company’s registration screen**