|  |  |
| --- | --- |
| Name Of The Student | Vaishnavi G |
| Internship Project Topic | Build a Classification Model for Drug Trials Dataset |
| Name of the Organization | TCS iON |
| Name of the Industry Mentor | Himdweep Walia |
| Name of the Institute | SRM Institute of Science and Technology |

|  |  |  |
| --- | --- | --- |
| Date | Day # | Hours Spent |
| 16/11/2022 | 36 | 5 hours |
| Activities done during the day:  **Project Handon - Getting drugs dataset and analyzing the dataset**  **Getting drugs dataset and analyzing the dataset**  **Data Set Information:**  The dataset provides patient reviews on specific drugs along with related conditions and a 10 star patient rating reflecting overall patient satisfaction. The data was obtained by crawling online pharmaceutical review sites. The intention was to study  (1) sentiment analysis of drug experience over multiple facets, i.e. sentiments learned on specific aspects such as effectiveness and side effects,  (2) the transferability of models among domains, i.e. conditions, and  (3) the transferability of models among different data sources (see 'Drug Review Dataset (Druglib.com)').  The data is split into a train (75%) a test (25%) partition (see publication) and stored in two .tsv (tab-separated-values) files, respectively.  **Attribute Information:**  1. UniqueID (numerical): drug ID  2. drugName (categorical): name of drug  3. condition (categorical): name of condition  4. review (text): patient review  5. rating (numerical): 10 star patient rating  6. date (date): date of review entry  7. usefulCount (numerical): number of users who found review useful  8. effectiveness (text): dosage of drug  9. sideEffects (text):side effect of the drug  **UniqueID:**   * A unique identifier (UID) is an identifier that marks that particular record as unique from every other record. * It allows the record to be referenced in the Summon Index without confusion or unintentional overwriting from other records. * The UID also allows for updates or deletes to overwrite the correct record. * Without a unique identifier, the updated record or the delete request cannot match to the intended record in the index. * It is used to identify the unique records in drug.   **Drug Name:**  In naming drugs, the most important considerations are avoiding drug names that are too similar to existing names—and therefore might compromise patient safety—and making sure the drug name communicates accurate information about the action or use of the substance.  The term "generic name" has several meanings as regards drugs:   * The chemical name of a drug. * A term referring to the chemical makeup of a drug rather than to the advertised brand name under which the drug is sold. * A term referring to any drug marketed under its chemical name without advertising.   "Diazepam" is an example of the chemical (generic) name of a sedative. It is marketed by some companies under its generic name and by other companies under brand names such as Valium or Vazepam.  Generic drugs marketed without brand names are less expensive than brand-name drugs even though they are chemically identical to brand-name drugs and meet U.S. Food and Drug Administration (FDA) standards for safety, purity and effectiveness.  **Conditions:**  Medicines and the process of combining ingredients to treat conditions have long been a part of human history, dating back to ancient Mesopotamia, as evidenced by the cuneiform clay tablets. The ancient materials describe the process of making salves (ointment) and other concoctions using various ingredients like plant and animal parts combined with odd rituals to provide cure or relief for various ailments.  Prescription medicines are medications aimed to target specific symptoms or illnesses, which require physician care and/or supervision. Doctors use prescriptions to prevent drug misuse, such as over usage, re-selling, or replication, and are often required when purchasing at a pharmacy or dispensary.  **Review:**   * Some people call them online reviews, some call them opinions, and others refer to them as feedback. Some people also consider the star ratings of a service or product before making a buying decision. * patient reviews provide many more benefits to your medical practice. * This “user-generated content” provides your healthcare website with relevant keywords that will continually be updated with the addition of new patient reviews.   **Rating:**   * A doctor must have at least 30 completed patient surveys in order to receive a rating, so you may see some doctors without a star rating. Some doctors, such as those who don’t practice in an outpatient setting, may not be included because of their specialty. * Feedback from their patients is gathered in other ways and not included in this survey. * Providers who are part of independent practices, or who have privileges at a Sutter-affiliated hospital but aren’t part of a Sutter-affiliated medical group or foundation, also aren’t included and their profiles won’t display star ratings at this time. * Ratings are based on mailed and emailed survey questions asking patients to rate their doctor on a scale of 1 to 10. We hope these patient ratings make your search for a doctor easier.   **Useful Count:**  Useful for taking a quick glance on how many drugs are used for different reason.  Useful for taking a quick glance on how many drugs are used for different reason.  **Effectiveness:**  Effectiveness can be defined as the extent to which a drug achieves its intended effect in the usual clinical setting.  It can be evaluated through observational studies of real practice. This allows practice to be assessed in qualitative as well as quantitative terms.   * Ineffective * Highly Effective * Considerably Effective * Marginally Effective * Moderately Effective   **Side effects:**  Several things can affect who does and does not have a side effect when taking a drug – age; use of other drugs, vitamins, or dietary supplements; or other underlying diseases or conditions (for example, diseases that weaken the immune system or effect the function of the kidneys or liver).  Side effects can happen when you:  SideEffects   * start taking a new drug or dietary supplement (for example, vitamins) * stop taking a drug that you’ve been on for a while, or * increase or decrease the dose (amount) of a drug that you take.   Common side effects include upset stomach, dry mouth, and drowsiness. A side effect is considered serious if the result is: death; life-threatening; hospitalization; disability or permanent damage; or exposure prior to conception or during pregnancy caused birth defect.   * Moderate Side Effects * Severe Side Effects * Extremely Severe Side Effects * Mild Side Effects * No Side Effects     Data from : <https://www.kaggle.com/datasets/jessicali9530/kuc-hackathon-winter-2018/> | | |