**PRASAD V. POTLURI SIDDHARTHA INSTITUTE OF TECHNOLOGY,**

**KANURU, VIJAYAWADA**

**DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING**

**INNOVATIVE TEACHING METHODOLOGY**

**Academic Year: 2023 - 24**

**Teaching Methodology – Project based learning (Group Activity)**

**Class :** II B.TECH

**Semester:** II - Semester

**Section:** S3

**Name of the Course:** Advanced Data Structures

**Name of the Faculty:** Dr. K. Jyothsna Devi

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**Name of the Topic:** Hashing, Priority Queue, 2-3 Trees, AVL Tress, Shortest path algorithms, Disjoint sets, String matching

**Number of Students Involved: 70**

**Group Members involved and the Title of the Projects:**

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| **Group No.** | **Student Name** | **Reg. No** | **Title of the Project** |
| Team -1 | P. AmulyaT.N.S. Samanvitha | 22501A05D722501A05H6 | File compression (heap) |
| Team -2 | Yarlagadda Eswar Aditya Shaik Fakruddin Syed Muhammad Afzal Varanasi Vijaya Sai Vignesh | 22501A05J822501A05G122501A05H522501A05J1 | Contact searching application (hash table, BST) |
| Team -3 | V. Phani Sirisha P. Harshitha Y. Anusha V. Sumanth  | 22501A05J222501A05E522501A05J722501A05I8 | Emergency Alert Triggering system (hash. Priority queue)  |

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| Team -4 | T. Vimala P. Nikitha Pavan Kumar .ChT. Tej Mahendra  | 22501A05I422501A05F022501A05E022501A05H9 | Task management (Priority queue) |
| Team -5 | R. B. AkshithaR. Sai RoshiniT. GayathriV. AnithaV. Srija | 22501A05F322501A05F422501A05H722501A05J022501A05J4 | Spell checker (Hash)  |
| Team -6 | T.Ramya T.Thanuja U Harshitha V.Divya Charitha  | 22501A05I022501A05I222501A05I622501A05I9 | Password hash (Hash) Universal hashing |
| Team -7 | P.Anand P. Lavanya P.Siddhartha V.Gnaneshwari  | 22501A05D322501A05D422501A05D522501A05J3 | Flight root planner (Shortest path algorithms) |
| Team -8 | S. Tejaswi T. Sai Ritish V. Venkata Ganesh V. Revanth V. Nitish Kumar  | 23505A051323505A051423505A051623505A051723505A0518 | Dynamic on line reservation (heap) |

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| Team -9 | T. Revanth P.Sai Advaith P. Mithil M. Sudeeksha T. Yogitha.  | 22501A05I522501A05D622501A05F222501A05H222501A05I3 | Railway Booking system ( heap) |
| Team -10 | V.Dhanush S.Sushruth. P.Chaitanya. P.Naveen kumar Sk. Irfan Haris  | 22501A05I722501A05G822501A05E622501A05E722501A05G2 | File management (hash) |
| Team -11 | Sk.Seema Sk.Sahira T.Meghana P.Meghana  | 22501A05G622501A05G422501A05H822501A05E3 | Metro route planner, (All pairs shortest path) |
| Team -12 | S.Yaswanth S.Surya Harsha S.Sarath Chandra full stackP.Nikhil fullstackP.Thrinath full stack | 22501A05F822501A05F722501A05H322501A05E822501A05E9 | Hospital emergency management (linked list, priority queue) |
| Team -13 | S.Syam. P.Sree satya Harsha S.Uday Bhaskar P.Harsha Vardhan P.Mahesh.  | 22501a05H122501A05E422501a05G9 522501a05D9 522501a05E2 | Restaurant reservation system (Priority queue, hash) |

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| Team -14 | Y. Siddhartha Syed Latheef R.sri Hari S. Mohit P. Phani Krishana | 22501A05G722501A05H422501A05F522501A05F922501A05D8 | Emergency contact Management system (hash) |
| Team -15 | Sk.Ruksana T.Hema Harshitha V.Keerthi Reddy S.Thanu Sri S.Santhi Deepika  | 22501A05F622501A05I122501A05J522501A05H022501A05G0 | Elevator scheduling (priority)  |
| Team -16 | P. SunandaShaik SameenaV. Mallika | 22501A05F122501A05G523505A0515 | Student Grade checker (hash) |

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  **Signature of the Faculty**