Locating and analysing the location of new stores or outlets is one of the common issues facing retailers and franchisers. This is due to assure that new opening stores are at their strategic location to attract the highest possible number of customers. Spatial information is used to manage, maintain and analyse these store locations. However, since the business of franchising and chain stores in urban areas runs within high rise multi-level buildings, a three-dimensional (3D) method is prominently required in order to locate and identify the surrounding information such as at which level of the franchise unit will be located or is the franchise unit located is at the best level for visibility purposes. One of the common used analyses used for retrieving the surrounding information is Nearest Neighbour (NN) analysis. It uses a point location and identifies the surrounding neighbours. However, with the immense number of urban datasets, the retrieval and analysis of nearest neighbour information and their efficiency will become more complex and crucial. In this paper, we present a technique to retrieve nearest neighbour information in 3D space using a clustered hierarchical tree structure. Based on our findings, the proposed approach substantially showed an improvement of response time analysis compared to existing approaches of spatial access methods in databases. The query performance was tested using a dataset consisting of 500,000 point locations building and franchising unit. The results are presented in this paper. Another advantage of this structure is that it also offers a minimal overlap and coverage among nodes which can reduce repetitive data entry.