



Department Of Computer Engineering

Programming

BBM102

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**Programming Language** : Java

**Subject** : Inheritance and Polimorphism

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## Problem:

The monopoly game contains 40 square, 2 player, 1 banker and type of properties are land, rail road, companies. Game contain two type of card desk which are chance and community chest list so they are located in the 40 square. In this development, json data type used for data and on classes used arraylists, polymorphism(for properties) and inheritance(for cards).

## Evolution of Algorithm:

I used polymorphism for properties class and subclasses which are railroads and companies, rent method overridden for them. I used inheritance for card class and subclasses are chanceList and communityChestList which have getCardAbility(), realizeCard() methods realizeCard() method using getCardAbility() method for understand the first card on the desk and realize it for player. player class have updatePlayerLocation(), moveAndBuy() methods updatePlayerMethod() decide player location after dice thrown and update him/her location according to different possibilities. moveAndBuy() method paid rent, or bought square. On main class was read json files and command file, while command file was reading moveAndBuy() method was calling and show() method.

