**FarmSimulator**

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### Project Overview:

FarmSimulator is a Java-based project developed as part of my coursework in Object-Oriented Programming (OOP). It simulates farm management, including livestock and crop inventory.

### Key Requirements:

- Stable, fully functional program with minimal crash risk.  
- Utilization of efficient, clear methods.  
- Application of multiple classes.  
- Implementation of inheritance and function overriding.  
- Ability to create, read, and write to a CSV file.  
- Version control using GitHub for branch management and pull requests.

### Program Instructions:

FarmSimulator offers a variety of menu options. Users can manage crop and animal inventory, add or remove items, and feed animals. A unique feature is the crop-specific diet for each animal. The program also includes a save feature to ensure no data is lost.

### Challenges and Solutions:

1. Branch Management in GitHub: Initially struggled with merging branches but resolved merge conflicts successfully.  
2. File Loading at Startup: Fixed an issue where the file read method was called twice.  
3. Input Validation: Implemented 'try and catch' blocks to prevent crashes due to invalid input.  
4. Feeding Mechanism: Modified the feeding logic to distinguish the pig’s diet from other animals.

The development of FarmSimulator has been an enriching journey, enhancing my skills in Java programming and problem-solving.