Part
virtual getName()

— Extends → **Frame**: getName()
— Extends → **Engine**: getName()
— Extends → **Battery**: getName()

Frame
getName()

Engine
getName()

Battery
getName()

Factory

— Extends → **FactoryFrame**: Frame* produce()
— Extends → **EngineFactory**: Engine* produce()
— Extends → **BatteryFactory**: Engine* produce()
— Extends → **CarFactory**: Car* produce()

FactoryFrame
Frame* produce()

EngineFactory
Engine* produce()

BatteryFactory
Engine* produce()

CarFactory
Car* produce()

Car
Frame* itsFrame_
Engine* itsEngine_
Battery* itsBattery_

Warehouse
forward_list<Frame*> frames_
forward_list<Engine*> engines_
forward_list<Battery*> batteries_
forward_list<Car*> cars_
int numOfFrames_
int numOfEngines_
int numOfBatteries_
int numOfCars_

Frame* getFrame()
Engine* getEngine()
Battery* getBattery()
Car* getCar()
void addFrame(Frame*)
void addEngine(Engine*)
void addBattery(Battery*)
void addCar(Car*)
bool enoughPartsToProduceCar()
int getFrameNumber()
int getEngineNumber()
int getBatteryNumber()
int getCarNumber()
void clearList_(forward_list)

FactoryManager
FrameFactory itsFrameFactory_
EngineFactory itsEngineFactory_
BatteryFactory itsBatteryFactory_
CarFactory itsCarFactory_
Warehouse itsWarehouse_

void produceFrame()
void produceEngine()
void produceBattery()
void produceAllParts()
bool produceCar()
int getEngineNumber()
int getFrameNumber()
int getBatteryNumber()
int getCarNumber()