Final 2009

Names: Ebrahim Taha Ebrahim #3

Ahmed Ebrahim HafeZ #4

Amr Gamal Mohamed #44

Mohamed El Sayed Mohamed #54

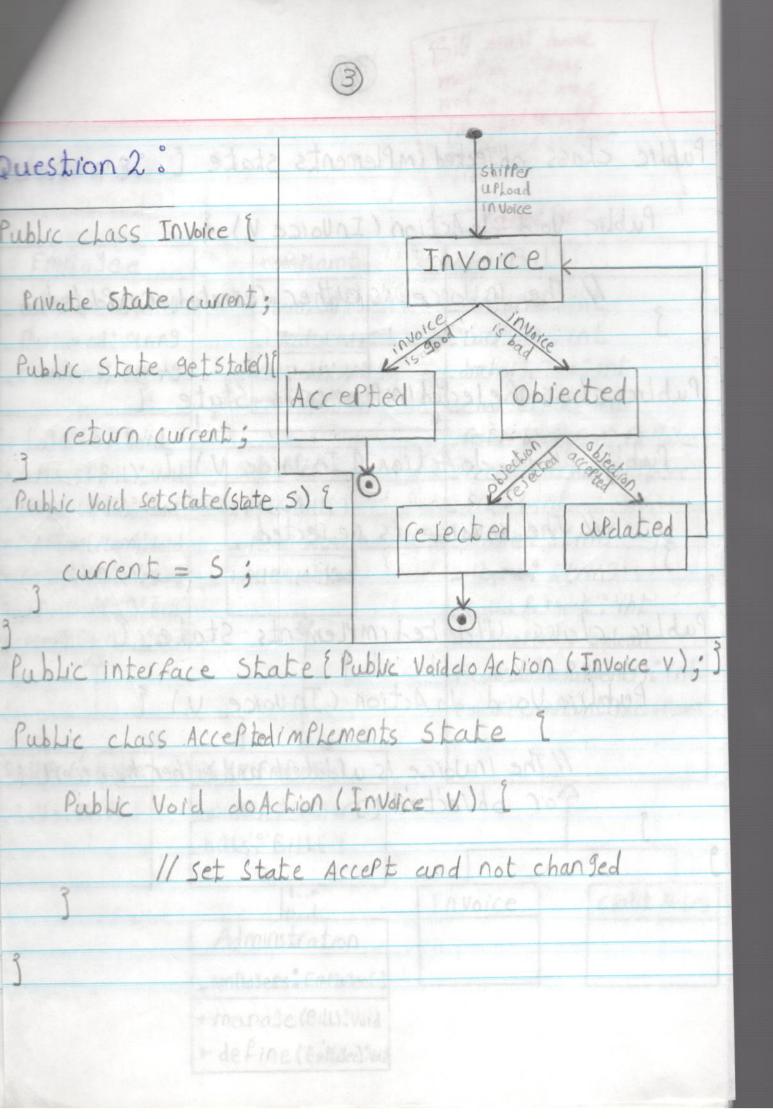
Mohamed Adel Abdel Fatah #58



Question 1:

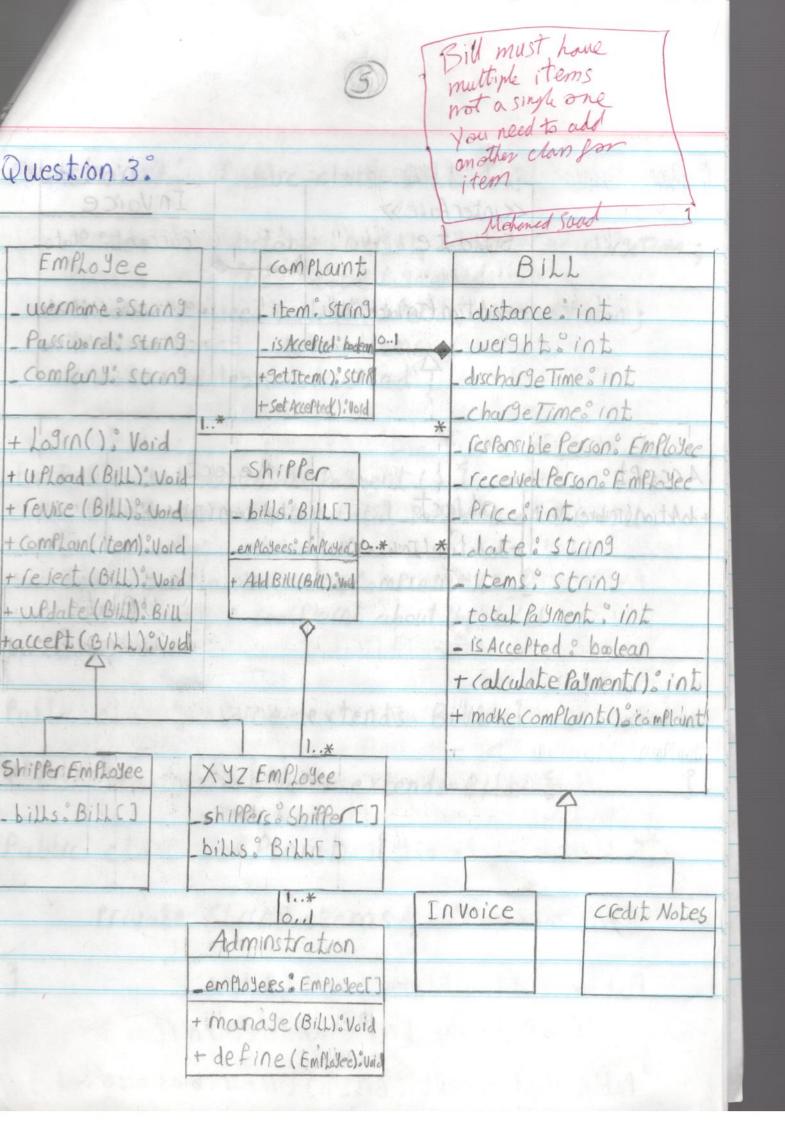
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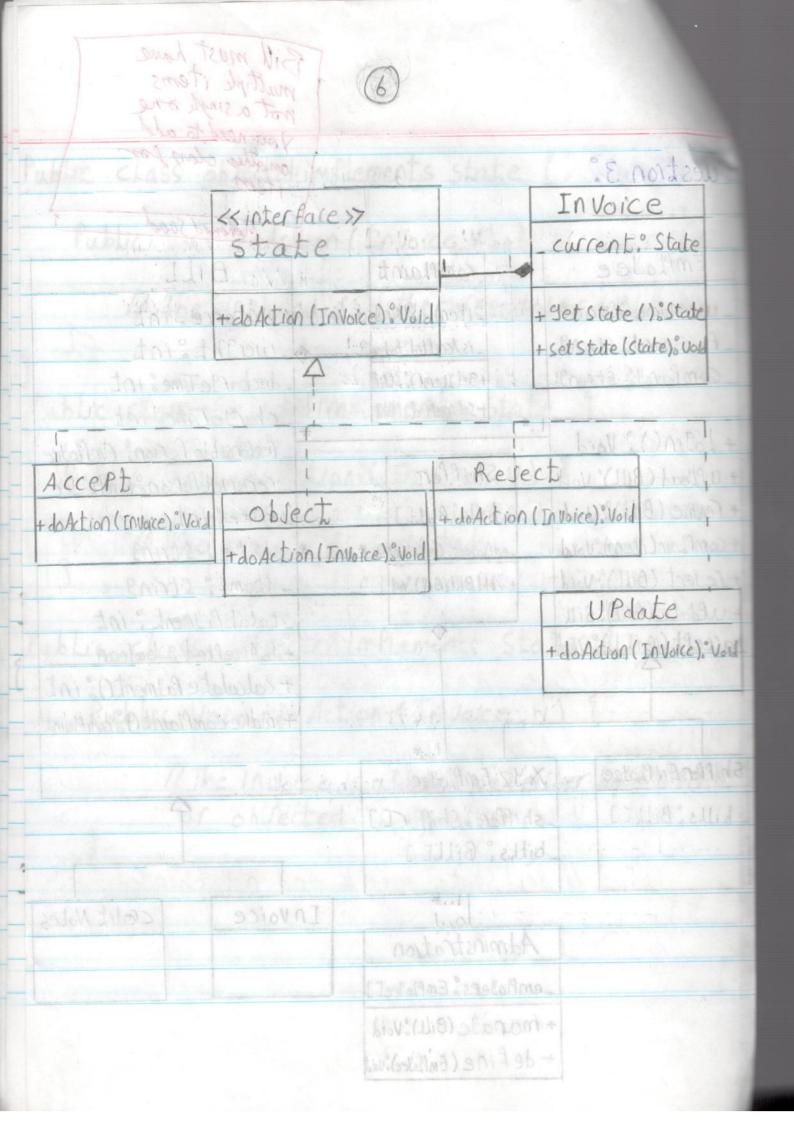
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Public chass objected implements state [. . anoid Public Void do Action (Invoice V) Savor sons The invoice is either rejected or wild ted blic State Telstide Public chass Rejected implements State Public Void do Action (Invoice V) ? ille Vail ststate (State 5) lodally The invoice is resected Public class UPdatedimPlements State Public Void do Action (Invoice V) c class Acceptal inflements 11 The invoice is uldated and either be accepted or obsected MI massach book side 11 set state Accept and not changed







Questron 4: Public class BILL (

Private int distance, weight, discharge Time, charge Time;
Private int Price, total Payment;
Private Employee responsible Person, received Person;
Private String date, items;
Private boolean is Accepted;

Public int calculate Payment () &

// calculate the total Payment of the bill

]

Public complaint make complaint () { I make a complaint about the bill

Public class Invoice extends BILL [1 1 1 1]

Public chass credit Notes extends BILL & 3

Public class complaint of the bound and

Private String items of strong

Public BILL uplate (BILL b) ?

If uplate the bill b and return it

Public Void accept (BILL b) (11 mark b as accepted

Public class Employee [615 side? : + noites Private String username, Password, Company; Public Vord Login () 1/ Log the user into the site. Public Void uPland (BILL b) { Public interpretation mant / whood Bill b to the site Public Void revise (BILL b) & 11 revise the BILL b Public Void ComPlain (String Items) [11 make complaint with the items. Public Word reject (Bill b) (200) Il mark the bill b as rejected. Public BILL uldate (Bill b) ? I whate the bill b and return it Public Void accept (BiLLb) { 1/ mark b as accepted }



Public chass Shiffer Employee extends Employee ? oldu? Private BILLES billsd; [] MA stobby Wates Public class XYZ Employee extends Employee [9 (d. 418) 118 660 Md.9 Private Shipper [] Shippers; Private BILLES BILLS; 118 66 Public chass Adminstration ? Private Employee [] employees; Lipping to property of the second of Public Void manage (BILL b) 11 gives BILL 6 to an Employee. Public Void define (Employee e) ? I add Employee e to the Ust of Employees. the second of the second of the second mark the complaint as Appartled a things the colored a contained to not Att



Public chass Shiffer & stallman 1911

Private BILL [] bills;
Private Employee [] employees;

Public add BILL (BILL b) &

Hadd BILL b to the Ust of BILLS.

Public class complaints &

Private String items;
Private boolean is Accepted;

Public String get Item () & The save

Wreturn items of the complaint

Public Vord set Accepted () 9 160

1/ mask the complaint as Accepted

Public Bill whate (Bill b) 2

I whate the Will b and return it

Public Void accept (BILL b) 1/ mark b as accepted

Question 5: Observer design Pattern

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XYZ Emfloyee Annual Mat Hol	Kinterface>>
+uPdate(): Void A V This Hold	+ notify All 1): Void
Public abstract class observer? Public void whate();	remove observer (observer) and
Public XYZ EMPLOYee extends observe	ChrEN
Public vord allate () (600)	ov Addus
3 11 11 make action according to	o notify
3	

Public interface subject & mordo : ? noitegu and Public Void notify AU(); Public void add observer (observer o); Public Void remove Observer (observer o); Public chass credit Notes [] Private List Lobserver > observers; Public Void notify All () & BIOU STANKA HOOF TO THE // whatie all the observers that action halfened Public Vold add observer (observer of & l'add observer o to the list of observers. Public Void remove observer (observer o) & 1 / remove observer a from the list of observers

Question 6: a object Pool design Patternia

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	manager 1			
	Reusable Pool			
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	- Reusable Pool			
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+ acquire Reusable (): Reusable				
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