

## Q\*bert exercise (ex#3) grades and comments

1 .r.n	2 .r.n	base grade	bonus1 (2p)	bonus2 (4p)	bonus3 (6p)	final grade
xxxxx0540	xxxxx0351	99		100		<b>103</b>
xxxxx7740	xxxxx2078	97	100		100	<b>105</b>
xxxxx6186	xxxxx0087	98	100			<b>100</b>
xxxxx7447	xxxxx8778	98	100	100	100	<b>110</b>
xxxxx9731	xxxxx8071	88		100		<b>92</b>
xxxxx8219	xxxxx5251	93	100			<b>95</b>
xxxxx7650	xxxxx6816	98	100			<b>100</b>
xxxxx9046	xxxxx6113	92	100	100		<b>98</b>
xxxxx7025	xxxxx5807	97	100			<b>99</b>
xxxxx4065	xxxxx0712	83	100			<b>85</b>
xxxxx8309	xxxxx3703	90	100	100		<b>96</b>
xxxxx6933	xxxxx4543	can't check				
xxxxx4887		92	100		70	<b>98.2</b>
xxxxx9535	xxxxx0011	95		100		<b>99</b>
xxxxx8085	xxxxx8299	85	100			<b>87</b>
xxxxx8032	xxxxx3784	97		100	100	<b>107</b>
xxxxx9197	xxxxx9860	95	100			<b>97</b>
xxxxx5896	xxxxx9543	89	100			<b>91</b>
xxxxx5167	xxxxx5335	85		100		<b>89</b>
xxxxx0989	xxxxx6854	98		100	100	<b>108</b>
xxxxx9997	xxxxx3249	50				<b>50</b>
xxxxx8281		100	100	100	100	<b>112</b>

xxxxx0540 xxxxx0351

- Manual rotation is sometimes unintuitive since it may rotate the scene in an opposite direction than the mouse movement.
- Nice animation, nice sounds
- Very good keyboard controls.
- Blinking effect is too fast
- When qbert talks to a face that is not directly in front of the camera it is sometimes difficult to see what's going on due to perspective occlusions. The view should have rotated accordingly. (-1)
- This game could get quite noisy in later stages.
- bonuses: sound, black holes

xxxxx7740 xxxxx2078

- Animation is sometimes jumpy, especially towards the end of the jump step (-1)
- Good rotation of the camera although it doesn't always rotate as fast as required in the game.
- Nice lighting
- Keyboard Controls aren't always intuitive (-1),
- Manual rotation sometimes rotates to the wrong direction.
- The game is very hard! (Had to tweak the code to get beyond the first level) (-1)
- bonus: custom level designs, texture mapping, original enemies, bonuses on map

xxxxx6186 xxxxx0087

- good keyboard controls.
- There is no clear indication that qbert died. the game just restarts
- Good automatic rotation
- Nice animation.
- After a manual rotation, the automatic rotation sometimes moves the camera to a viewpoint where qbert is cannot be seen (-2)
- Map could be bigger to fit the entire window.
- bonus: texture mapping, sound

xxxxx7447 xxxxx8778

- Nice visual effects
- good keyboard controls
- Very good camera control
- When moving from the upper pyramid to the lower, qbert passes through the structure (-1)
- The up-side-down view is a little confusing. should have rotated the whole scene.
- Bug: The boss can spawn on top of qbert.
- What is that dreadful whistle?
- In advanced levels it is difficult to predict where enemies are going to land.
- When jumping on a cube only one face is lit up instead of the whole cube (-1)
- bonus: Visual effects, sound, original enemies, additional models, face lighting modes, texture mapping, original level designs.
- Very well done!

xxxxx9731 xxxxx8071

- Cube colors are confusing. should have used one color for "lit" and one for "not lit". not 6 different colors. (-2)
- Keyboard control are intuitive and snappy
- Good camera control
- Nice animation.
- Game is very hard even in the "Easy" difficulty.
- Bug: Enemy can spawn on top of qbert
- Submitted code doesn't run. throws an exception upon execution. (-10)
- Without being able to use the submitted code or skip levels I had no way to check anything beyond level 2.
- bonus: sound, original game options, additional model.

xxxxx8219 xxxxx5251

- Rotation of the cube when qbert passes from top to bottom doesn't work correctly. the board rotates but it doesn't rotate to the right side. after the rotation the board seem to just fix itself magically. This is very confusing. (-5)
- qbert can fall off the board, in complete contrast to the requirements of the exercise (-2)
- There is no indication that qbert died. the game just restarts.
- Unnecessary code duplication - separate class for every level
- bonus: sound

xxxxx7650 xxxxx6816

- Good camera control
- Keyboard control is sometimes confusing and unpredictable. after the view rotates up is down and down is up. (-1)

- When jumping over a ledge qbert passes through the structure (-1)
- The indication that qbert died isn't very clear.
- Manual rotation sometimes rotates the view to unexpected directions.
- Bug: enemies can spawn on top of qbert.
- bonus: sound, original models.

xxxxx9046 xxxxx6113

- No lighting. (-4)
- The animation could be better- jumping sideways doesn't rotate the model sideways, jumping over a ledge makes the model go through the structure (-2)
- "Write your name at the console"... what if there is no console? game is stuck. (-1)
- Manual rotation results in subsequent automatic rotation to be wrong. (-1)
- If there is no elevator, movement from an extreme corner is counter-intuitive.
- Manual rotation sometimes rotates the view to unexpected directions.
- collision with enemies doesn't always work as it should.
- bonus: elevators, original models, sound, bombs

xxxxx7025 xxxxx5807

- Very original take on the keyboard controls. Highly intuitive although very different from the original game.
- The frame rate or all animations - both the characters and animation is somewhat low.
- No animation for jumping over a ledge (-1)
- Manual rotation sometimes rotates the view to unexpected directions.
- The indication that the user died is not clear enough.
- It is possible to enter a long loop of structure rotation when pressing the up button multiple times on the ledge.
- The smurf animation could be better. he looks like he is sliding on the cubes without touching them. (-2)
- bonus: sound, original models

xxxxx4065 xxxxx0712

- The double pyramid structure you build is different from the one in the requirements. The connection between triangle faces contains two cubes. (-2)
- Enemies that are not on the face where qbert is don't seem to move. (-3)
- You did not implement automatic rotation of the scene when qbert passes a ledge. The view seem to just jump to the new location. This is highly confusing. (-10)
- Implemented only very basic animation. qbert is always facing the same way. no animation for passing over a ledge. (-2)
- Manual rotation sometimes rotates the view to unexpected directions.
- Code and design are somewhat bloated.
- bonus: sound

xxxxx8309 xxxxx3703

- Your first submission did not contain the needed data files.
- Its not clear why you submitted the JAR wrapped in a compressed exe. a simple JAR would have sufficed
- keyboard control is good and very responsive.
- When qbert jumps beyond a ledge the view jumps into a new location. This abrupt transition is very confusing. The transition should have been animated. (-7)
- When qbert jumps beyond a ledge the animation qbert passes through the structure(-1)
- manual rotation rotates around the upper cube. This essentially makes this feature completely

useless. It should have rotated around the middle point of the structure. (-2)

- cubes should be completely colored when stepped on, not just the upper face.
- playing on the bottom side is very confusing because everything is up-side-down.
- Manual rotation results in subsequent automatic rotation making qbert not viewable. This problem persists even for any subsequent games.
- bonus: sound, original models
- Please, no appeals. this is your final grade.

xxxxx6933 xxxxx4543

- You seem to have some kind of a problem with the lighting. Qbert is completely in the dark and there seem to be no lighting what so ever in the scene. This essentially makes your game unplayable. Please submit a again because I can't grade this work.

xxxxx4887

- No source code submitted.
- Nice opening screen + mouse control.
- When qbert goes over the ledge, there is no rotation transition. The camera just seem to flip instantaneously. This is very confusing. (-6)
- Over the ledge animation takes qbert inside the structure (-2)
- Very nice mouse control.
- Good keyboard control
- cubes should have been completely colored, not just one face.
- Jumping to an elevator is somewhat unintuitive since they seem to just float in space.
- The game is really hard.
- bonus: sound, original models, elevators.

xxxxx9535 xxxxx0011

- Very good camera control although somewhat jumpy
- Good and intuitive keyboard control although it takes some time getting used to.
- The indication of qbert dieing is not clear enough.
- You have a strange bug that doesn't allow windows to move the window out of focus correctly...
- If qbert jumps fast enough between three cubes it is possible that the middle cube will not be lit (-2)
- Collision test with enemies doesn't always work correctly. a few times it failed to detect a collision. one time it got the game to completely freeze. (-1)
- Jumping over the ledge takes qbert inside the structure and it looks like he just appears at the other side. you should have made a separate animation for this step. (-2)
- Good game balance. not too easy and not too difficult.
- bonus: sound, good UI

xxxxx8085 xxxxx8299

- You did not implement automatic rotation of the scene to follow qbert automatically when he moves from one face to another. this was a requirement (-10)
- There is some kind of lighting problem. some models appear completely dark (-2)
- Bug: jumping on a ledge cube from the bottom side does not light it. only jumping on it from the top side does. (-1)
- enemy models are often seen intersecting the structure. (-2)
- Very good animation
- The game is very hard. enemies are too smart and it is virtually impossible to finish the first level.
- There is no correlation between the jump sound and the actual jumping of the character.

- bonus: sound

xxxxx8032 xxxxx3784

- Very nice visual effects.
- Original mouse control so no points were reduced for lack of automatic camera control.
- When going over a ledge qbert passes through the inside of the structure. (-2)
- It is not very clear what are the next possible steps qbert can make. it could have been better if you highlighted the possible selections for the next move.
- When the player loses a life for some reason the highlighting of the cubes in the level are reset. (-1)
- It seems that you went through reinventing the wheel for your mouse control. the right way to do this is use [glPushName\(\)](#) and a [selection matrix](#) and let OpenGL tell you which triangle was selected.
- bonus: original models, texturing, visual effects

xxxxx9197 xxxxx9860

- There is a strange lighting problem which makes scene look very dark from some points of view. (-2)
- Automatic camera control is nice, good manual control although somewhat restrictive and very slow.
- good keyboard control
- The indication that qbert dies is not clear enough
- navigation from the top cube is somewhat not intuitive
- The transparency of the cubes doesn't add much and is somewhat confusing.
- The teleportation cubes is a clever way to avoid the animation of going over the ledge. yet it is somewhat restrictive to the game. The transition animation (rotation of the board) should have been implemented never the less. (-2)
- When qbert uses the top teleported the camera doesn't follow him (-1)
- bonus: sound and good music

xxxxx5896 xxxxx9543

- The camera does not follow qbert when he steps to the back of the board. a manual rotation is needed (-4)
- Manual rotation doesn't rotate the scene around the center of the structure. this makes navigation very confusing. (-2)
- When the player loses a life for some reason the highlighting of the cubes in the level are reset. (-1)
- Keyboard are somewhat unpredictable.
- You did not use any lighting (-4). you should have made sure you use OpenGL features you did learn before using something as fog which wasn't even mentioned in class
- The cube colors in some stages is confusing. it's not clear which cubes are lit and which are not.
- Good animation.
- Your main class is way too big. you should have divided the renderer to a different class.
- bonus: sound - nice music.

xxxxx5167 xxxxx5335

- the game would not start unless there exists a file called "c:\test.gif" (-2)
- It is unclear why you draw the 3 axis lines during the game or why you print so many debugging numbers. (-1)
- Keyboard controls are unclear and undocumented. It seems the the controls are played as if this was a game played in first person yet the view is always from the side. This makes controlling

qbert highly unintuitive. (-5)

- The animation is too fast. you should not have relied on frame rate or CPU speed to pace the animation. the animation should have been based on a timer. Still, sometimes the game seem to enter a state of super slow motion. (-7)
- It is virtually impossible to complete the second level due to the speed of the enemies and the unintuitive controls.
- When stepping on a cube you should have colored the whole cube and not just its upper face.
- When the game is over the application exits. What?
- Unimaginative lighting makes the board looks somewhat flat and confusing to navigate.
- The custom level designs are very nice. it is very unfortunate their usability is hindered by the problems of the game.
- bonus: sound, custom levels

xxxxx0989 xxxxx6854

- Very original idea although this is not a strictly first person view. In first person view you don't see the actual character.
- Very good control and animation.
- You should have made it more clear when qbert loses a life.
- The controls aren't completely orthogonal. When qbert stands on the top cube subsequent movement is not the same as it is when he stands on a ledge cube.
- It could have been nice if the aerial view would have rotated automatically so that qbert is visible all the time.
- The game is very slow
- Using an .obj model for a box is an overkill. You should have drawn the box simply as 6 quads. this is probably one of things that made the game slow. The box you are using contains 394 faces instead of just 6. more over you shouldn't have duplicated the box 6 times but use the same model with different textures.
- Same goes for the ball. You should have used GLU instead of loading a model (-2)
- The heart model could have been a simple texture and not a 656 faces model which is never really viewed in 3D.
- Your qbert model contains no less than 10042 faces. decreasing this model to just 1000 faces would have increased the performance of the game tenfold.
- Its not very clear why all of your code is compiling to a library which is statically linked to the exe.
- bonus: original models, original concept and controls design, texturing.
- Overall, Very well done!

xxxxx9997 xxxxx3249

- You did not submit the source code. (-5)
- You do not use any models. (-10)
- Ball animation is too fast and barely visible. Instead of relying the frame rate you should have used a timer. (-5)
- There is a serious bug in the diamond drawing. quite often parts of the structure are not visible. (-10)
- When standing on a ledge, pressing the side key only moves the view but not the actual ball.
- Nothing seem to happen when I finish the board (-10)
- Enemies don't move when the user is standing still. (-5)
- There is no clear indication that the user lost a life (or there is but it is too fast to see)
- There is only one type of enemy and it is not very smart (-5)
- nice rotation of the viewpoint.

xxxxx8281

- Very nice animation

- Very good camera control
- The pyramid has a double base. This is not exactly the structure you were supposed to implement.
- You could have used better lighting. in some views the board looks somewhat confusing.
- The indication that qbert died isn't very clear.
- There should have been some indication when the pac-man mode is in effect.
- There is a minor bug with the camera positioning in some situations. When qbert is on an edge of a pyramid and jumping to the other side the camera does not follow him.
- When the game is over you should have brought the main menu automatically.
- First person view isn't really useful because the user can hardly see what's going on around him.
- Very nice and original game features. specifically the bomb and walking bomb.
- bonus: sound, original models, original game features, textures
- Very well done!