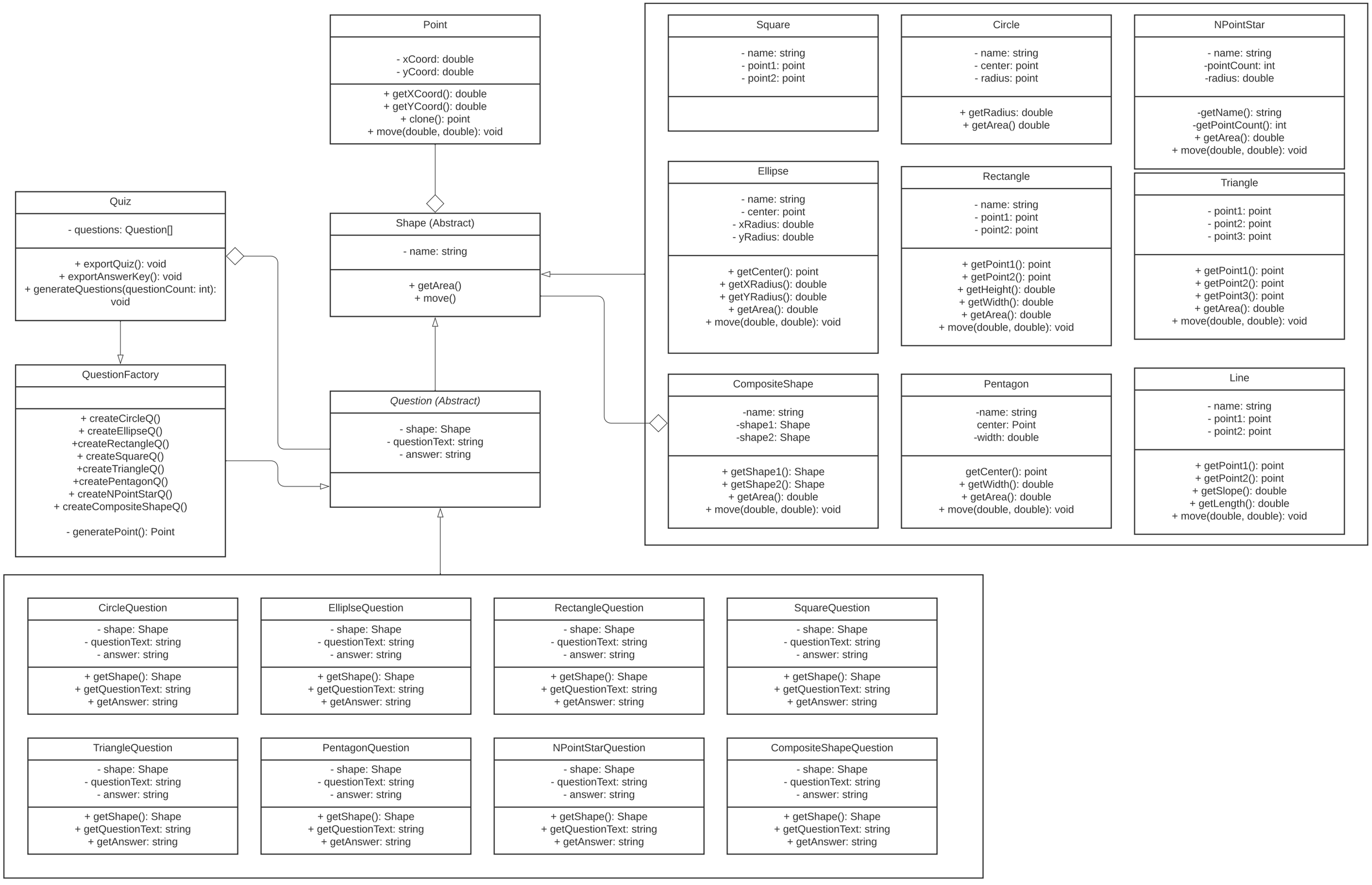
Point
- xCoord: double
- yCoord: double
+ getXCoord(): double
+ getYCoord(): double
+ clone(): point
+ move(double, double): void
Quiz
- questions: Question[]
+ exportQuiz(): void
+ exportAnswerKey(): void
+ generateQuestions(questionCount: int): void
Shape (Abstract)
- name: string
+ getArea()
+ move()
QuestionFactory
+ createCircleQ()
+ createEllipseQ()
+createRectangleQ()
+ createSquareQ()
+createTriangleQ()
+createPentagonQ()
+ createNPointStarQ()
+ createCompositeShapeQ()
- generatePoint(): Point
Question (Abstract)
- shape: Shape
- questionText: string
- answer: string
Square
- name: string
- point1: point
- point2: point
Circle
- name: string
- center: point
- radius: point
+ getRadius: double
+ getArea() double
NPointStar
- name: string
-pointCount: int
-radius: double
-getName(): string
-getPointCount(): int
+ getArea(): double
+ move(double, double): void
Ellipse
- name: string
- center: point
- xRadius: double
- yRadius: double
+ getCenter(): point
+ getXRadius(): double
+ getYRadius(): double
+ getArea(): double
+ move(double, double): void
Rectangle
- name: string
- point1: point
- point2: point
+ getPoint1(): point
+ getPoint2(): point
+ getHeight(): double
+ getWidth(): double
+ getArea(): double
+ move(double, double): void
Triangle
- point1: point
- point2: point
- point3: point
+ getPoint1(): point
+ getPoint2(): point
+ getPoint3(): point
+ getArea(): double
+ move(double, double): void
CompositeShape
-name: string
-shape1: Shape
-shape2: Shape
+ getShape1(): Shape
+ getShape2(): Shape
+ getArea(): double
+ move(double, double): void
Pentagon
-name: string
center: Point
-width: double
getCenter(): point
+ getWidth(): double
+ getArea(): double
+ move(double, double): void
Line
- name: string
- point1: point
- point2: point
+ getPoint1(): point
+ getPoint2(): point
+ getSlope(): double
+ getLength(): double
+ move(double, double): void
CircleQuestion
- shape: Shape
- questionText: string
- answer: string
+ getShape(): Shape
+ getQuestionText: string
+ getAnswer: string
EllipIseQuestion
- shape: Shape
- questionText: string
- answer: string
+ getShape(): Shape
+ getQuestionText: string
+ getAnswer: string
RectangleQuestion
- shape: Shape
- questionText: string
- answer: string
+ getShape(): Shape
+ getQuestionText: string
+ getAnswer: string
SquareQuestion
- shape: Shape
- questionText: string
- answer: string
+ getShape(): Shape
+ getQuestionText: string
+ getAnswer: string
TriangleQuestion
- shape: Shape
- questionText: string
- answer: string
+ getShape(): Shape
+ getQuestionText: string
+ getAnswer: string
PentagonQuestion
- shape: Shape
- questionText: string
- answer: string
+ getShape(): Shape
+ getQuestionText: string
+ getAnswer: string
NPointStarQuestion
- shape: Shape
- questionText: string
- answer: string
+ getShape(): Shape
+ getQuestionText: string
+ getAnswer: string
CompositeShapeQuestion
- shape: Shape
- questionText: string
- answer: string
+ getShape(): Shape
+ getQuestionText: string
+ getAnswer: string