Unit 7

Summary

Important Points

- Inheritance: introducing features at the correct level such as

  trajectory/velocity into MovablePiece

- Using appropriate typing to ensure that introduced features are available

  collisions expect a MovablePiece and an ArcadeGamePiece

- Inclusion Polymorphism: designing for evolution of the system

  new types of obstacles and movable pieces are easy to introduce

- Constructors/Destructors

  Virtual destructors that handle specific class needs

- Design Patterns: using standard approaches to solve standard problems

  Composite, Visitor, Singleton, Observer

- Using a pattern language to describe a related set of problems the MFC pattern language

More Important Points

- Exceptions: using exceptional return paths for exceptional situations as well as errors

  collisions, winning, losing

- C++ safety features

  typed pointers and references

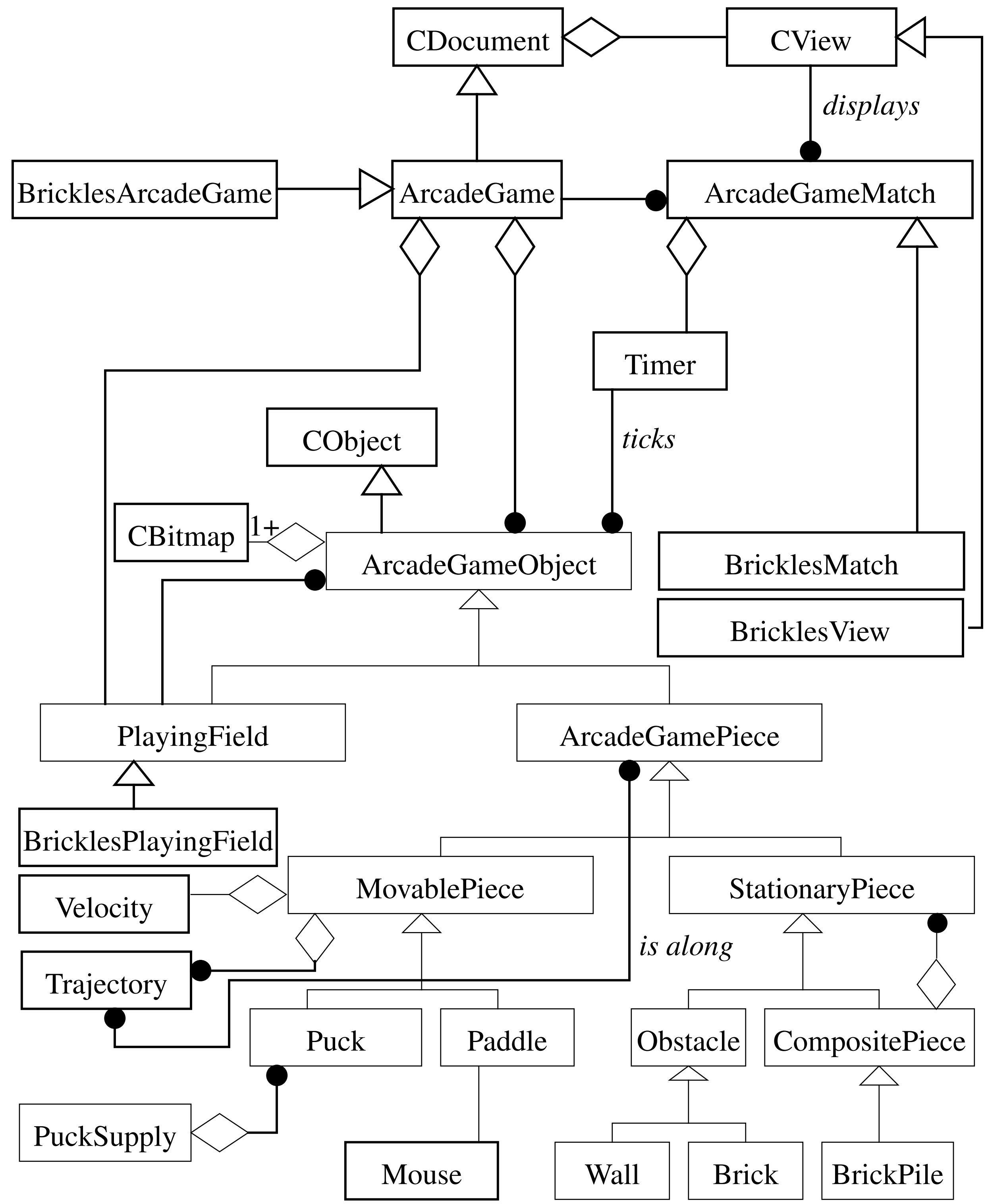
  const

- C++ optimization features

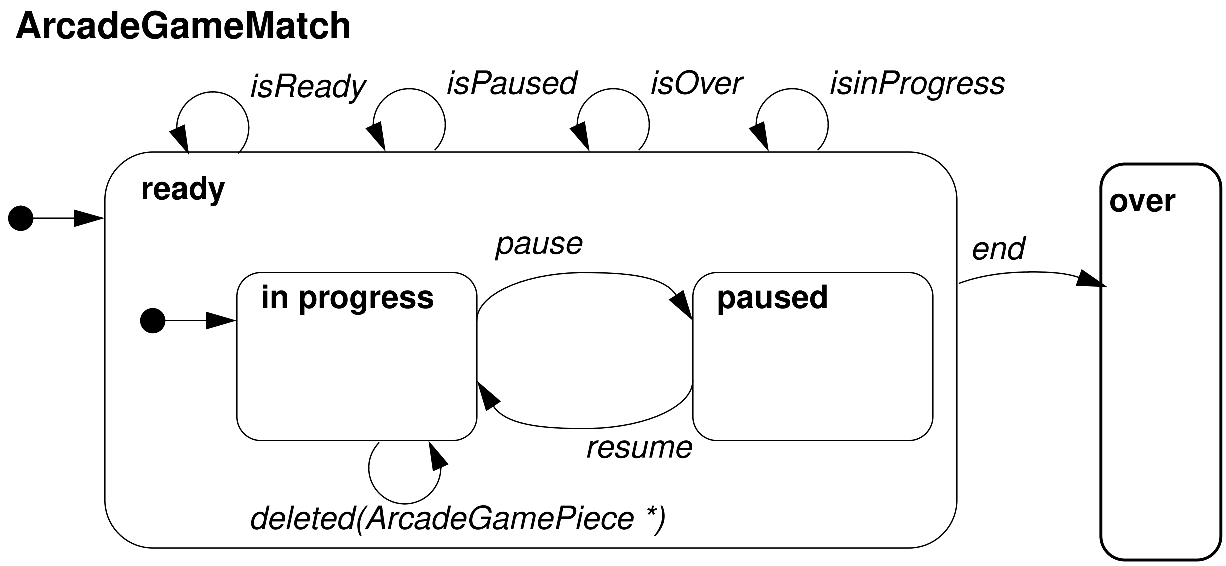
  references (const references)

  inline methods

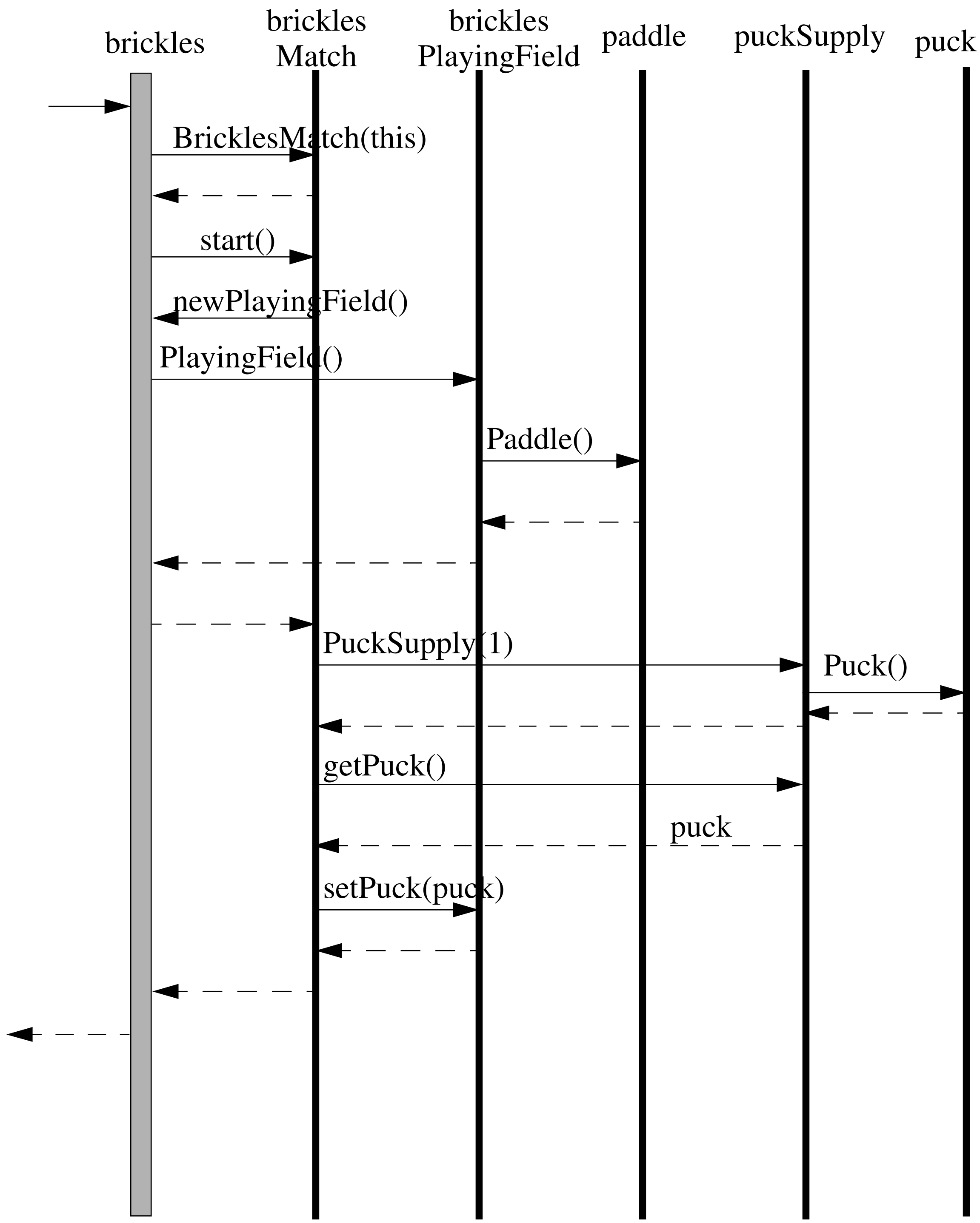
Object Models



Dynamic Models



Object Interactions



Questions and Action Items

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Thanks

- Thank you for attending this course.
- Remember us for future object-oriented training and consulting.
- Let us know about your design and implementation experience. We'd like to hear about your successes and your difficulties.