

PLAIT Workshop – November 1st, 2013

Teaching Strategies for Life-lasting Learning

Dedicated to Prof. Tudor Sorin

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Life-lasting Learning



- Unique Experiences
 - Knowledge discovery
 - Skill achievement
 - Personal connection
 - Learning environment

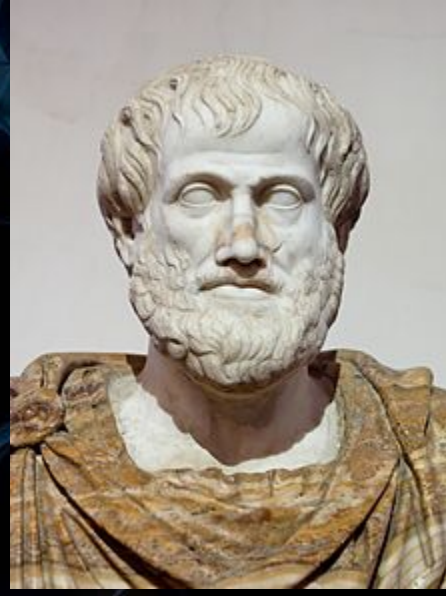
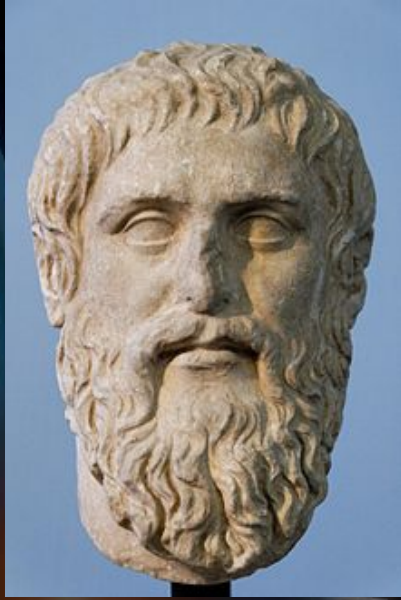
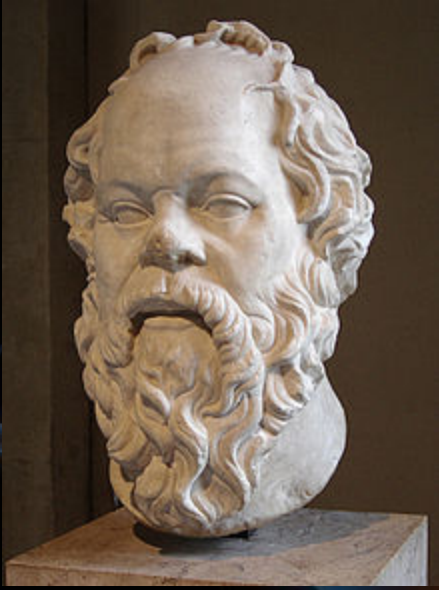
In the Beginning...



- **Platonic Academy of Athens (387 BC)**

The Disciple

- Socrates
- Plato
- Aristotle



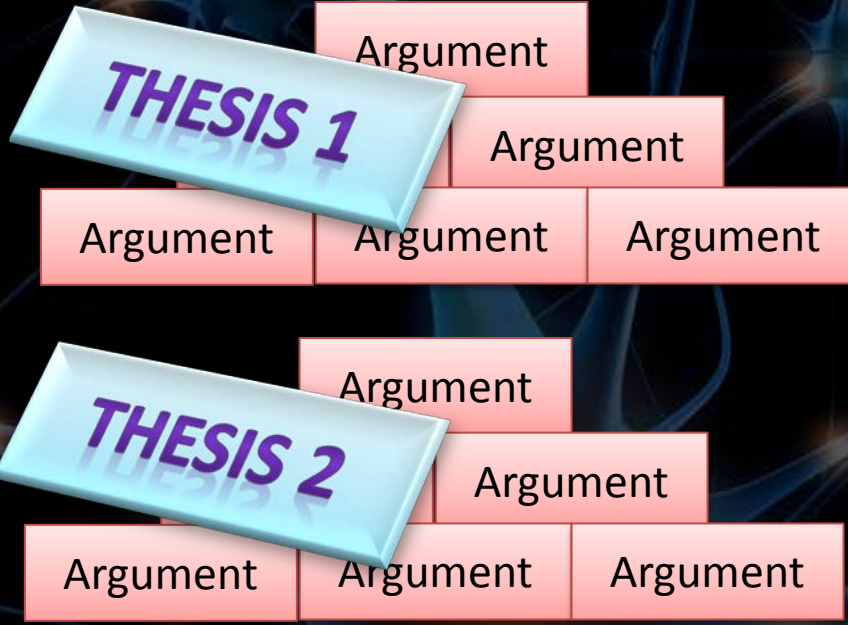
The Methods



- Socratic Method
 - Inquiry
 - Critical Thinking
 - Illuminate Ideas
 - Questioning / Answering
 - Dialectic method

The Methods

- Dialectic method
 - Resolve disagreement
 - Discourse - dialogue
 - Reasoned Arguments
 - Establish the truth

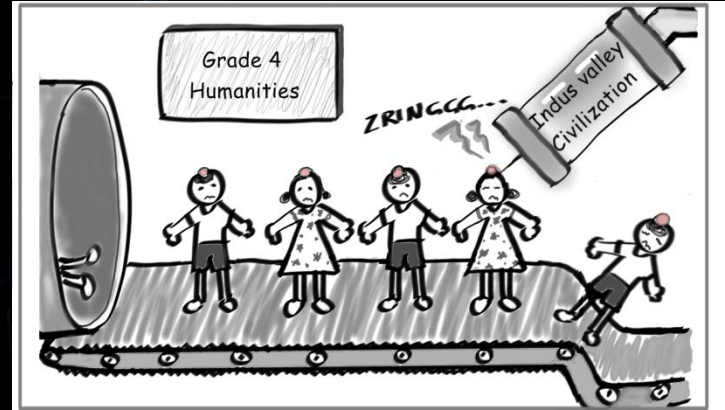


SYNTHESIS

The Antithesis



- Personal tutoring
- Industrial teaching
- Cost effective?



The Synthesis

- Personal Mentoring
- Personalized Learning
- Team Mentoring
- Team Learning



The Team

- Group of students
- Common objective
- Heterogeneous knowledge
- Diverse background



Team Mentoring



- Assessment
 - Team and individual
- Objectives
 - Course
 - Team
 - Individual

Team Learning

- Personalized learning
- Team central learning
- Collaboration Technology
- Peer mentoring



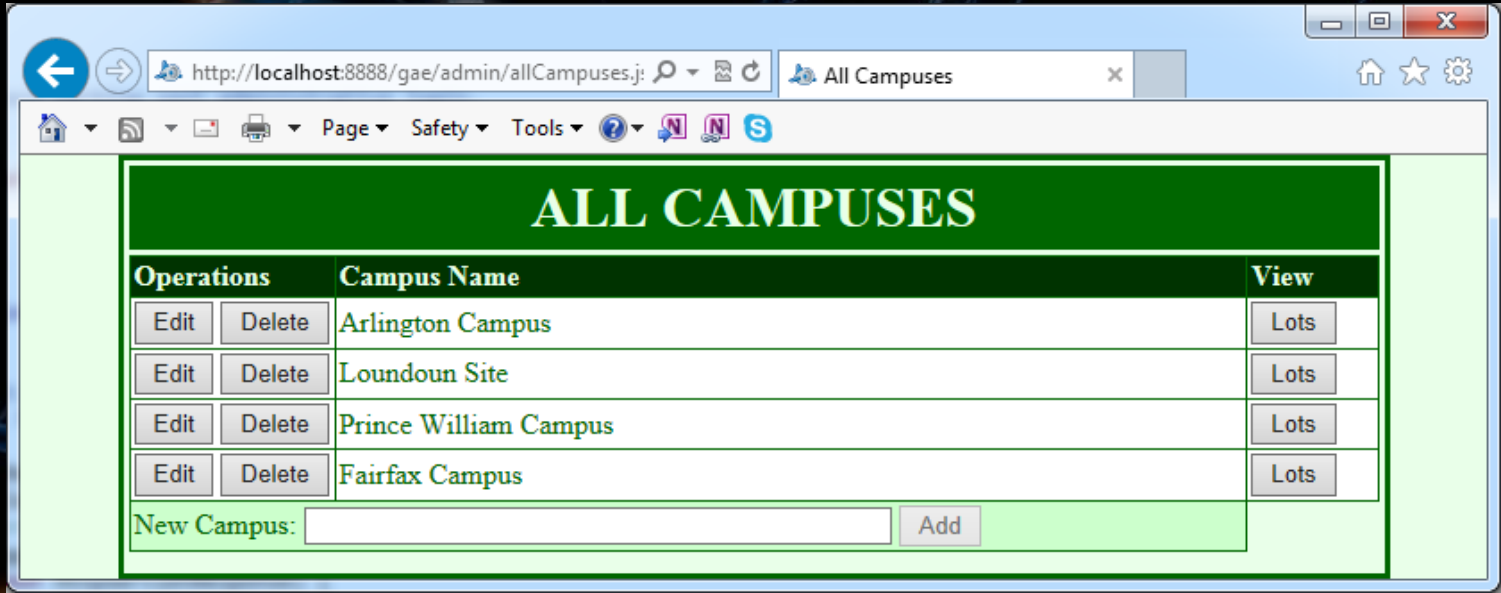
Case Study

- Rapid Development of Scalable Applications
 - AIT 499-002 / AIT 390
- Google App Engine / Java
- Server and client side technology
- Cloud technology

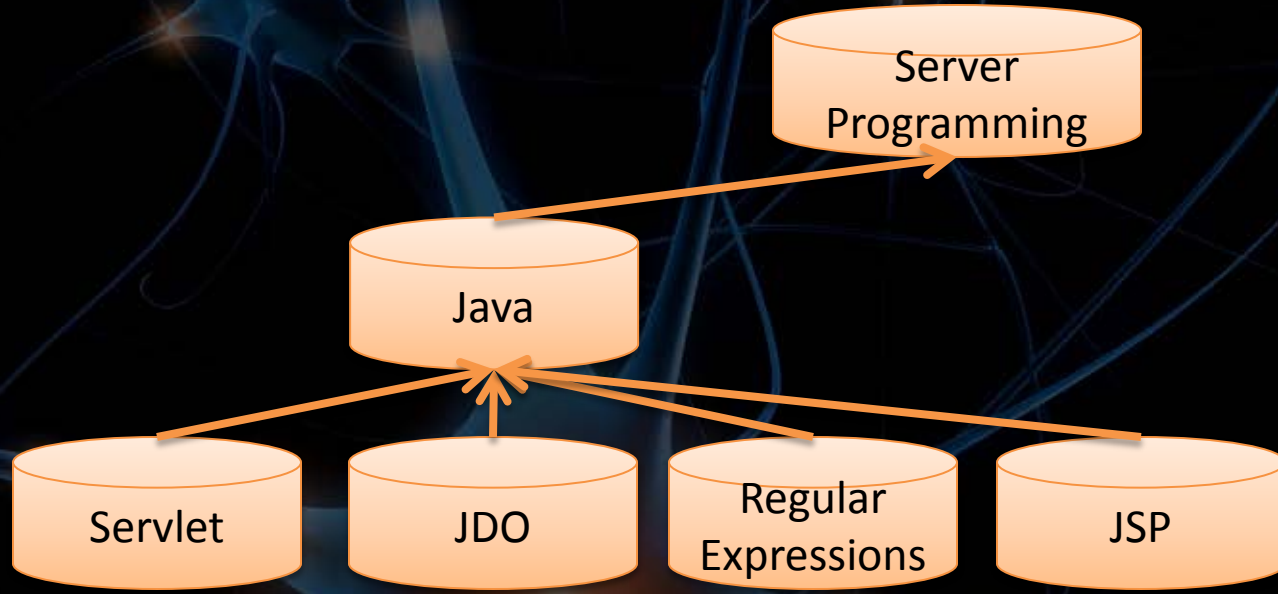


Google

Application: Parking Spot



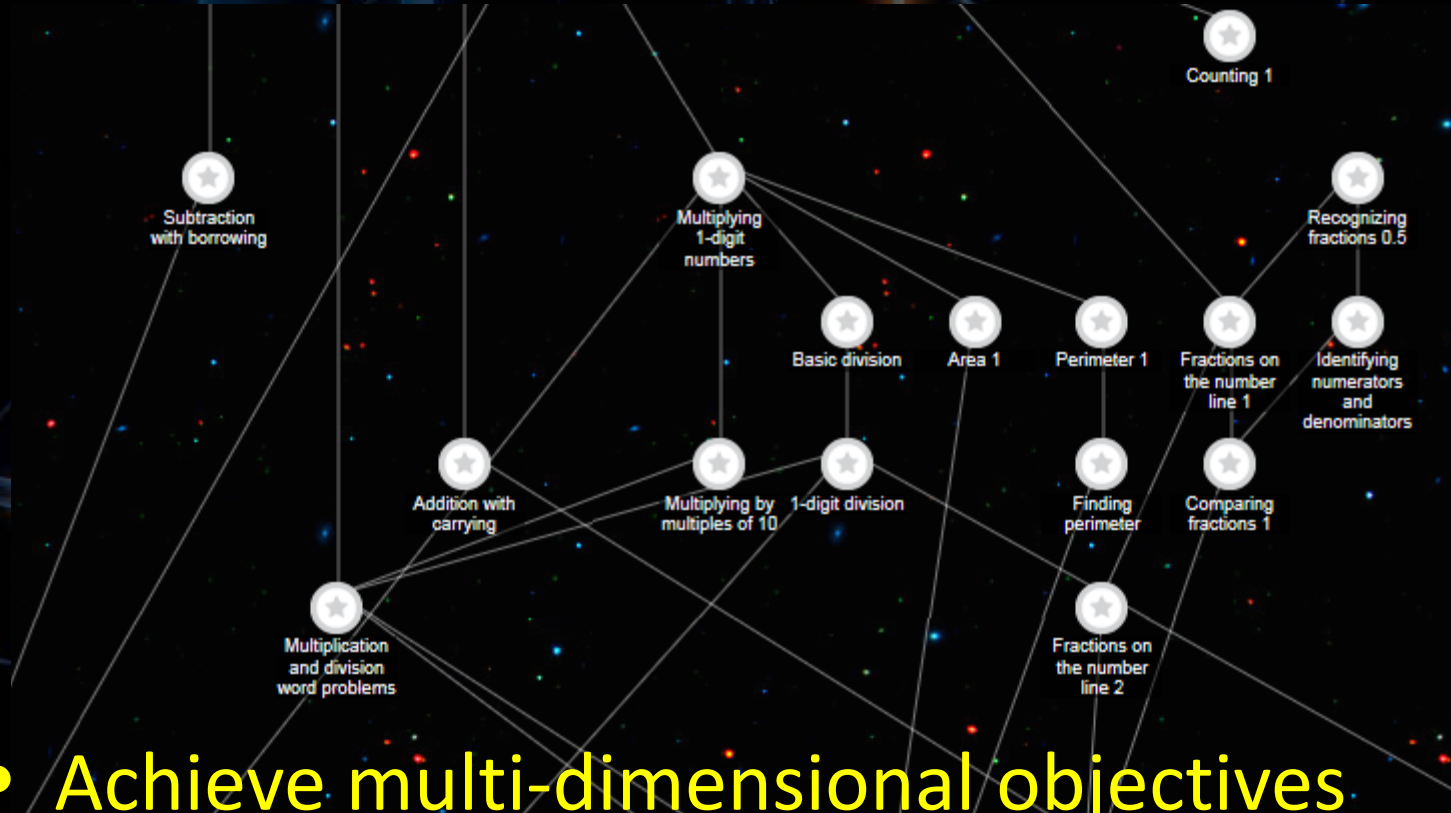
- Finding a parking spot in Mason
 - Selected by the students
 - Agile RAD methodology
 - Administrative console



- Hierarchical structure
- Hands-on tutoring
- Developer documentation
- Structured main path (RAD)

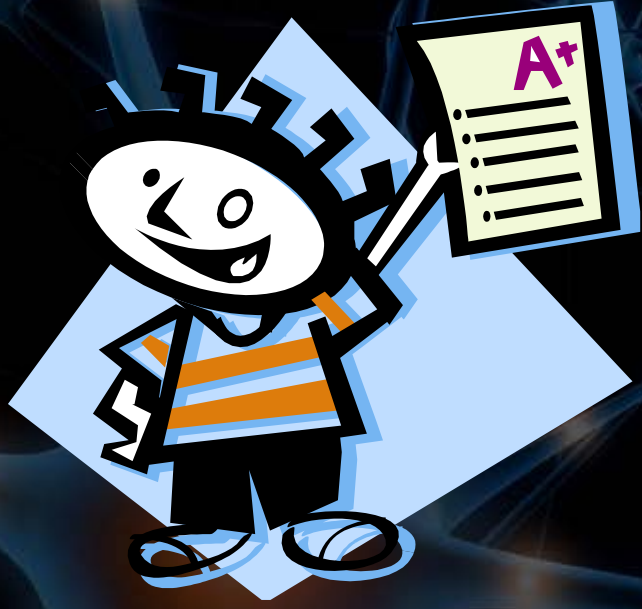
Individual Learning Path

- Achieve multi-dimensional objectives
- Based on competency assessment
- Allow dynamic adaptation
- Mentored by instructor



Assessment and Grading

- Multidimensional assessment
 - Team level
 - Individual level
- Personalizable course objectives

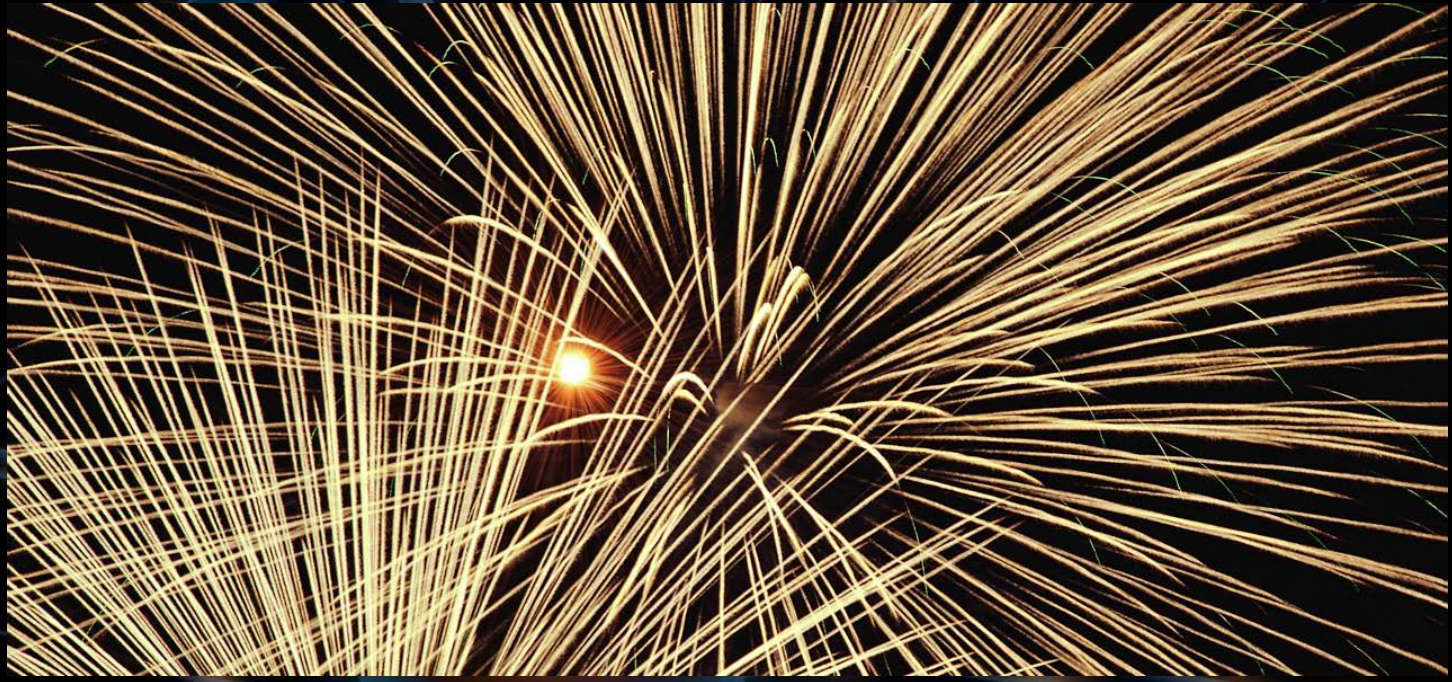


Entrepreneurial Teams

- IT Entrepreneurship
- Educational Programs
- LITE supporting activities



Conclusions



- Innovative teaching is needed
- Great opportunity in AIT
 - Course level
 - Concentration level
 - Program level