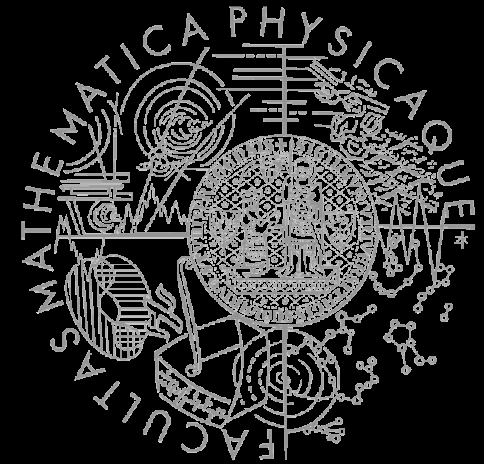


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24<sup>th</sup> March 2010

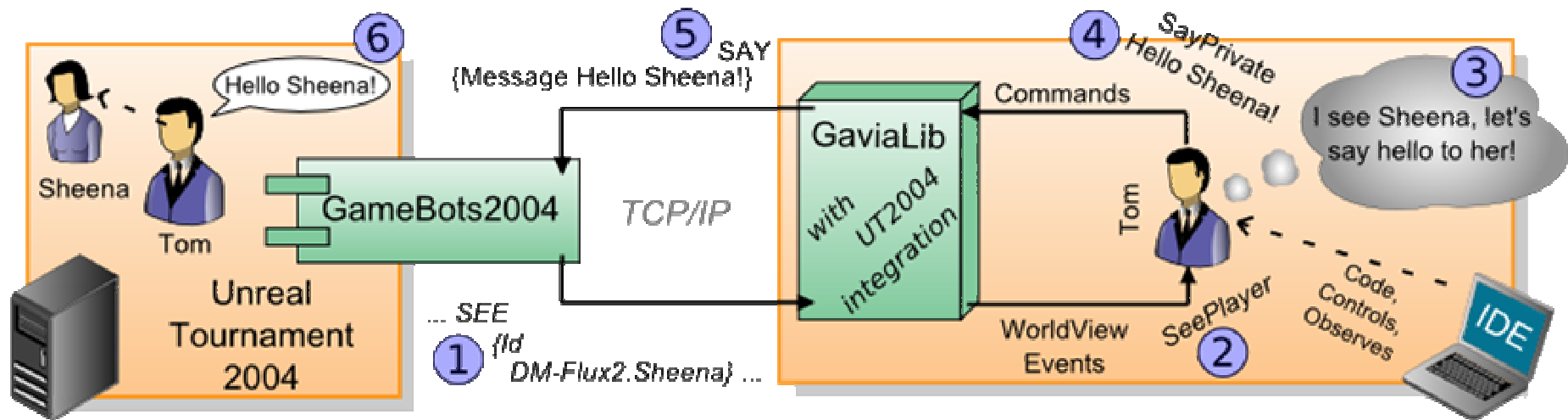


UT2004 bots made easy!

# Pogamut 3

Lecture 2 – Exploring the map

# Pogamut 3's agent



# PathFollower

How many of you have tried? 😊

Lecture's home page:

<http://diana.ms.mff.cuni.cz/pogamut-devel>

Go to the 2<sup>nd</sup> lecture and get example of PathFollower bot.

Let's check it through!

# PathFollower

- `wv = getWorldView()`
- `self = wv.getSingle(Self.class)`
- `self.getLocation().getDistance(...)`
- `wv.addEventListener(pathListener)`
- `pathListener = new`  
    `IWorldEventListener<Path>() { ... }`
- `act = getAct()`
- `act.act(new Move()...)`
- + storing states

# Lecture – path following

- What if bot gets stucked?
  - Let's address this just for now...
  - `self.getVelocity()`
  - livelock ...
- What if bot needs to jump?
  - You may try `getAct().act(new Jump())`
- What if the mover is on the path?

# Homework

- Create Item searcher
- Ignore the knowledge of items
  - `getWorldView().getAll(Item.class)`
- Use `IVisionWorldView` and use `getAllVisible(Item.class)`
- Try to run around the whole level and discover (almost) all items
- How to know that your bot has visited almost everything?

# Map - useful Java collection

- `Map<UnrealId, Item> seenNavs = new Map<UnrealId, NavPoint>();`
- `Map<UnrealId, Item> items = new Map<UnrealId, Item>();`
- `If (items.get(item.getId()) == null) {`  
    ... unknown item ...  
`} else {`  
    ... known item ...  
`}`