

# Instance Fields

Talk to a Teacher

<http://spoken-tutorial.org>

National Mission on Education through ICT

<http://sakshat.ac.in>

Arya Ratish

IIT Bombay

10 April 2012



# Learning Objectives



# Learning Objectives

- **About Instance Fields**



# Learning Objectives

- About Instance Fields
- To access the instance fields of a class



# Learning Objectives

- About Instance Fields
- To access the instance fields of a class
- **Modifiers for instance fields**



# Learning Objectives

- About Instance Fields
- To access the instance fields of a class
- Modifiers for instance fields
- **Why instance fields are called so?**



# System Requirements



# System Requirements

- **Ubuntu 11.10 OS**





# System Requirements

- Ubuntu 11.10 OS
- **JDK 1.6**



# System Requirements

- Ubuntu 11.10 OS
- JDK 1.6
- Eclipse 3.7.0



# Prerequisites



# Prerequisites

- Create a class in Java using Eclipse



# Prerequisites

- Create a class in Java using Eclipse
- Create an object for the class



# Prerequisites

- Create a class in Java using Eclipse
- Create an object for the class
- Please refer to the spoken tutorial on these topics available at <http://spoken-tutorial.org>



# Instance Fields



# Instance Fields

- **Objects store their individual states in fields.**





# Instance Fields

- Objects store their individual states in fields.
- These fields are declared without the static keyword.



# Instance Fields

- Objects store their individual states in fields.
- These fields are declared without the static keyword.
- **Non-static fields are also known as instance variables or instance fields.**



# Why instance fields are called so?



# Why instance fields are called so?

- **Values are unique to each instance of a class.**



# Why instance fields are called so?

- Values are unique to each instance of a class.
- Each object will have unique values.



# Reference Variables



# Reference Variables

- **Variables that refer to objects are reference variables.**



# Summary





# Summary

- **About instance fields**
- **Accessing the fields using dot operator**



# Assignment



# Assignment

- Create an object emp2 in the TestEmployee class.
- Initialize the values of the two objects using dot operator.



# Assignment



# Assignment

- Use 55 and Priya as values for first object.
- Use 45 and Sandeep for values second object.
- Display the values for both the objects in the output.



# About the Spoken Tutorial Project

- Watch the video available at [http://spoken-tutorial.org/What\\_is\\_a\\_Spoken\\_Tutorial](http://spoken-tutorial.org/What_is_a_Spoken_Tutorial)
- It summarises the Spoken Tutorial project



# About the Spoken Tutorial Project

- Watch the video available at [http://spoken-tutorial.org/What\\_is\\_a\\_Spoken\\_Tutorial](http://spoken-tutorial.org/What_is_a_Spoken_Tutorial)
- It summarises the Spoken Tutorial project
- If you do not have good bandwidth, you can download and watch it



# Spoken Tutorial Workshops

## The Spoken Tutorial Project Team

- Conducts workshops using spoken tutorials
- Gives certificates to those who pass an online test
- For more details, please write to [contact@spoken-tutorial.org](mailto:contact@spoken-tutorial.org)





# Acknowledgements

- Spoken Tutorial Project is a part of the Talk to a Teacher project
- It is supported by the National Mission on Education through ICT, MHRD, Government of India
- More information on this Mission is available at <http://spoken-tutorial.org/NMEICT-Intro>

