

A CODERETREAT IS A HANDS-ON SOFTWARE DEVELOPMENT WORKSHOP FORMAT. IT CONSISTS OF MULTIPLE SESSIONS OF 45 MINUTES IN LENGTH. IN THOSE SESSIONS YOU IMPLEMENT CONWAYS GAME OF LIFE WITH ANOTHER PERSON TOGETHER USING TEST-DRIVEN DEVELOPMENT (TDD) AND THE 4 RULES OF SIMPLE DESIGN. BE READY TO DELETE YOUR CODE AFTER EACH SESSION AND TAKE SOME TIME TO REFLECT ABOUT IT. YOU HAVE THE CHANCE TO PAIR UP WITH SEVERAL PEOPLE THROUGH THE DAY. PLEASE BE WELCOMING, KIND AND PATIENT TO EACH OTHER. HAVE FUN CODERETREATING!

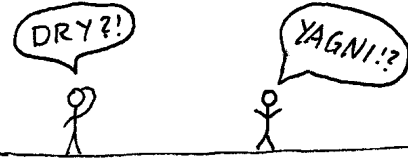
INTRODUCTION

## 4 RULES OF SIMPLE DESIGN

- KENT BECK

1. TEST PASS
2. EXPRESSES INTENT
3. NO DUPLICATION
4. SMALL

MAKE TEST PASS ALL THE TIME  
USE EXPRESSIVE LANGUAGE  
DON'T DUPLICATE KNOWLEDGE  
KEEP ONLY NECESSARY PARTS

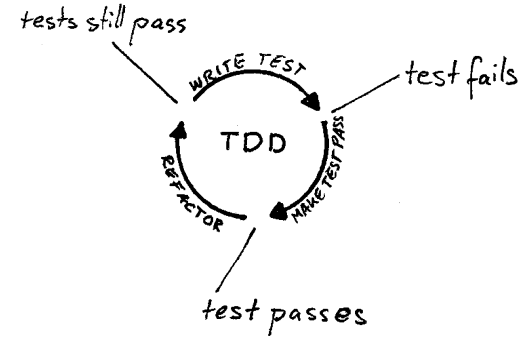


## PAIR PROGRAMMING

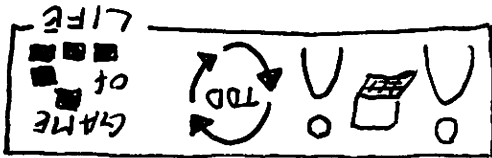


TALK BEFORE YOU CODE  
HAVE A COMMON UNDERSTANDING  
DRIVER COMMUNICATES WHILE  
TYPING AND CHANGING CODE  
NAVIGATOR SUPPORTS DRIVER  
KEEPS EYE ON CODEBASE FIT  
SWITCH ROLES REGULARLY  
HIGH FIVE YOUR SUCCESSSES

## TEST DRIVEN DEVELOPMENT



WRITE TEST FIRST, MAKE IT FAIL  
WRITE MINIMAL IMPLEMENTATION  
TO MAKE TEST PASS  
REFACTOR CODE IF NEEDED  
WRITE NEXT TEST...



CODERETREAT

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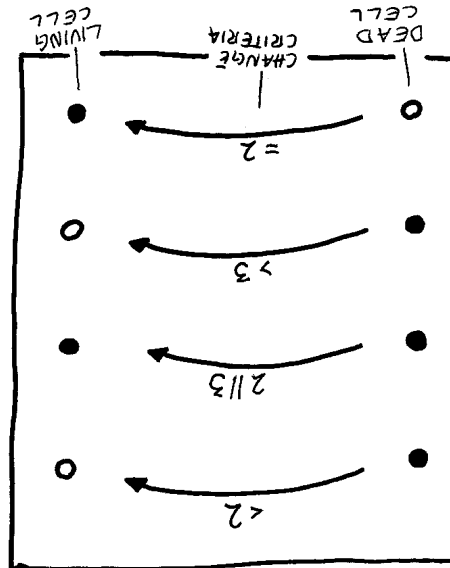
SOFTWARE CRAWLER  
COMMUNITY WEBSITE



CODERETREAT WEBSITE



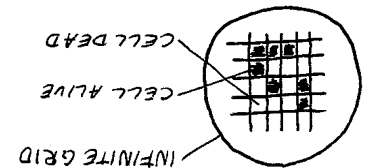
REFERENCES



GAME OF LIFE

- ① IF CELL HAS LESS THAN TWO NEIGHBOURS, IT'S DEAD IN THE NEXT GENERATION
- ② IF A LIVING CELL HAS TWO OR THREE NEIGHBOURS, IT STAYS ALIVE IN THE NEXT GENERATION
- ③ IF A LIVING CELL HAS MORE THAN THREE LIVING NEIGHBOURS, IT'S DEAD IN THE NEXT GENERATION
- ④ IF A DEAD CELL HAS EXACTLY THREE LIVING NEIGHBOURS, IT COMES TO LIFE IN THE NEXT GENERATION

RULES ARE APPLIED ON GRID AT ONCE



CONWAYS GAME OF LIFE