

DIPLOMA THESIS Documentation

Author(s)	Bacher Fabian, Dalipovic Nino, Gutmann Florian, Wolfgruber Bastian
Form, academic year	5BHWIN, 2025/26
Topic	Improving Basketball Efficiency through Video Analysis
Co-operation partners	HTL Leoben

Assignment of tasks	<p>Gutmann</p> <ul style="list-style-type: none"> • Backend • Database • Interaction with frontend • Statistical analysis <p>Dalipovic</p> <ul style="list-style-type: none"> • Frontend • User interface (select/create players, various displays) <p>Wolfgruber</p> <ul style="list-style-type: none"> • Video analysis (actual trajectory) • Detection of the ball's trajectory • Comparison and evaluation between target and actual <p>Bacher</p> <ul style="list-style-type: none"> • Video analysis (target trajectory) • Detection of the basket / release • Calculating and visualizing the ideal flight parabola (target trajectory)
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Realisation	Development of a system by June 2026 that automatically analyzes basketball shots and helps players measurably improve their shooting technique through visual feedback and statistics.
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Results	To measurably improve basketball players' shooting technique using an intelligent video and analysis system.
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Illustrative graph, photo (incl. explanation)	No graphics.
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Participation in competitions Awards	No
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Accessibility of the Diploma Thesis	Library, HTL Leoben
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Approval (Date / Signature)	Examiner	Head of College
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